

# EDTECH 561: Research in Educational Technology

## Fall 2010 (8/23-12/14)



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### Instructor E-Mail Response Time

I typically respond to e-mail twice per day Monday through Friday during the semester. Exceptions to this rule occur when there is a holiday, BSU break, or during other unavoidable situations that sometimes come up (e.g. spring break, power failure, out-of-town conference presentations, etc.). If you send an e-mail during the week you should typically have a reply within 24 hours unless it is late Friday or the weekend. I catch up on weekend e-mail on Mondays. If you do not received a reply to your e-mail within a reasonable period of time please send it again. Sometimes e-mail is captured by SPAM filters, is addressed incorrectly, or just simply does not make it through. Also, check your own e-mail filters that screen out junk mail. It is likely that my e-mail response got filtered into your e-mail junk box.

Note: **Always include EDTECH561 and a short description of message purpose in your subject line. This will help ensure your message get my attention.**

### Course Description

In this introductory research course, you will learn the foundational knowledge and skills for conducting research in Educational Technology and education in general, through engaging in extensive reading, discussions, and application of what you learn:

- Review and analysis of research studies in educational technology;
- Foundations in the relationships among different research design and measurement;
- Methods for designing, conducting, and reporting educational technology research.

**(Prerequisites:** EDTECH 504: Theoretical Foundations of Educational Technology)

### Required Text:

- Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research (3rd Edition) by John W. **Creswell**.

### Recommended Reference:

- Publication Manual of the American Psychological Association, Sixth Edition.

### Course Objectives:

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 subproblems.

- 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.

### Expected outcome:

- A strong version of Chapter 1 (Introduction) and Chapter 2 (Literature Review) for your thesis research.
- Understanding and ability in
  - Generating research(able) questions,
  - Conducting critical review of literature
  - Designing research studies for questions in Educational Technology
- Present your revised course project at EDTECH-related Conferences after this course. (This is optional but strongly encouraged.)

### Resources:

- **EDTECH Library Guide:** <http://guides.boisestate.edu/edtech>
- **EDTECH Library Workshop** via Adobe Acrobat (recorded): (<http://admin.na5.acrobat.com/a768376479/p11225653>).
- **Bibliography tool**
  - Endnote Web guide: <http://guides.boisestate.edu/endnote>
  - **APA reference style guide**
  - APA Exposed, 6 Edition Modules (an online tutorial by Harvard Graduate School of Education) [http://isites.harvard.edu/icb/icb.do?keyword=apa\\_exposed](http://isites.harvard.edu/icb/icb.do?keyword=apa_exposed)
  - APA style example (Albertsons Library, Boise State University) <http://guides.boisestate.edu/content.php?pid=19421&sid=420892>
- **Research compliance**
  - IRB Office: <http://www.boisestate.edu/research/compliance/irb.shtml>
  - The Collaborative Institutional Training Initiative (CITI) online training program <http://www.citiprogram.org> (Human subject protection and research ethics)
- **Selected EDTECH-related Conferences** (Yes. It is a totally legitimate idea to submit your final project work to one of the conferences. You get to network with colleagues in our field and have your work published! Let me know if you are interested in doing so.)
  - **AECT** (Association for Educational Communication and Technology) Annual Convention: <http://www.aect.org/>
  - **AACE** (Association for the Advancement of Computing in Education)
    - **ED-MEDIA** (World Conference on Educational Multimedia, Hypermedia & Telecommunications): <http://www.aace.org/conf/edmedia/>
    - **E-LEARN** (World Conference on E-Learning in Corporate, Government, Healthcare, & Higher Education is an international conference): <http://www.aace.org/conf/elearn/>
    - **SITE** (Society for Information Technology and Teacher Education): <http://site.aace.org/conf/>
  - **AERA** (American Educational Research Association) Annual Meeting: <http://www.aera.net/>
- **Research Methods Knowledge Base** by William M.K. Trochim: <http://www.socialresearchmethods.net/kb/contents.php>
  - A convenient and searchable research knowledge base.

## Types of Course Activities and Assignments

1. **Reading:** It is strongly advised that you finish reading the assigned text before participating in the online forum discussion. You will better engage in and learn more about the weekly topics.
2. **Discussion Forum:** The discussions are designed to help you prepare toward your final project. You will find your active participation well worth it because you will be able to establish the building blocks for your final project of this course through the discussions. You will find yourself benefit from the discussions in becoming a critical producer and consumer of research.
3. **Annotated Bibliography:** This is critical to practice your research knowledge and skills learn in this class at a smaller scale. You will be able to include the references you annotated and articles reviewed in your final project.
4. **Chapter Drafts:** This allows you to start small and build toward your final project.
5. **Project Draft and Peer Feedback:** This is one step away from your Final Project. Instructor feedback and peer feedback will be provided to help you revise and edit your work to achieve the final stage--a strong version of Chapter 1&2 for your master's thesis.
6. **Final Project:** This is the most important, accumulated work in this course. You should find yourself confident in completing and submitting quality work if you actively involved in the building blocks above.

**Feedback/grades** – your assignments will be reviewed and evaluated by the instructor within one week after the assignment due date. Depending upon the assignment, you will receive a rubric with comments or receive points earned for assignment completion. Please check the gradebook area of Moodle by the Tuesday following the assignment due date. If you do not have an assigned grade, please contact the instructor.

## Grading Policy and Grading Scale:

Assignments	Points	Points = Grade
Course Survey	5	940 – 1000 = A
End-of-Course Survey	5	900 – 930 = A-
CITI Training (Human Subject Protection) x 1	10	870 – 890 = B+
Discussion x 16 (20 points each) (Post and Respond)	320	840 – 860 = B
Annotated Bibliography x4 (25 points each)	100	800 – 830 = B-
First draft of Chapter Two	50	770 – 790 = C+
First draft of Chapter One	50	740 – 760 = C
Second Draft of Chapter Two	50	700 – 730 = C-
Final Project Draft	120	670 – 690 = D+
Feedback to Peer's Final Project Draft	60	640 – 660 = D
		600 – 630 = D-
		590 – Below = F

Reflection on Peer's Feedback	30
Final Project	200
Total Points	1000

# Course Policies

**Time Management and Commitment:** An online course can take a considerable amount of time. Be aware that the university “recommends that you plan on 3-4 hours of course work per credit per week for Distance Ed classes. For example, a 3-credit class would require 9-12 hours of your time per week (BSU Distance Education).” For this reason, I would strongly suggest beginning each assignment early. Work on it regularly over the week rather than waiting until the last day or two. This will allow you to have the chance to work out problems or get help if needed.

**Participation:** Depending on the class activities, you are responsible for completing weekly assignments, participating in discussions, and checking in to the course site on a consistent basis.

**Assignments:** You will always be given explicit instructions on where to submit your assignments. Assignments are usually due on a weekly basis – the exact dates will always be found in the activities and course schedule. **Late work will ONLY be accepted IF you have a personal or family emergency that has prevented your submission of an assignment, and you must notify the instructor via e-mail. Whether or not late work is accepted is entirely at the discretion of the instructor.**

**Backing up your files:** You should always save your work on your own computer as well as on another storage device.

## Faculty Initiated Drop

Please be advised that if you do not “attend” class at least once during the first week, I will drop you from class. Since this is an online course, this requirement means that you **MUST** be present in our Moodle course site during the first week and participate in the introductions.

## Incompletes

Please be advised that I strictly follow the rules for incompletes. In order for me to give you an incomplete in this course, the following two criteria **MUST** be met:

1. Your work has been satisfactory up to the last three weeks of the semester.
2. Extenuating circumstances make it impossible for you to complete the course before the end of the semester.

In order to receive an incomplete, we must create a contract stipulating the work you must do and the time in which it must be completed for you to receive a grade in the class. The contract time may not exceed one year. If no grade other than incomplete has been assigned one year after the original incomplete, the grade of 'F' will automatically be assigned. The grade of 'F' may not be changed without the approval of the University Appeals Committee. You may not remove the incomplete from your transcript by re-enrolling in the class during another semester. A grade of incomplete is excluded from GPA calculations until you receive a final grade in the course. If I assign a grade of incomplete you will received an email notification that you have "Registrar To Do Items" on BroncoWeb.

## Student Code of Conduct

It is expected that students in this class will create original works for each assignment. We will follow the [BSU Student Code of Conduct](#). In the event of academic dishonesty a complaint is filed with the BSU Student Conduct Office with supporting documentation. This complaint remains on file and actions may be taken against the student (e.g., loss or credit, grade reduction, expulsion, etc.).

We will also observe [U.S. copyright laws](#) in this course. Several great links to copyright information are available on the BSU Academic Technologies site at: <http://itc.boisestate.edu/resource.htm>

In addition to the above, please respect the following guidelines:

- Please submit original work for each project. Projects that were created for other classes may not be submitted for credit in EDTECH 561. Each project may only be submitted for credit one time by the person who created it. The BSU Student Code of Conduct states: "Academic dishonesty also includes submitting substantial portions of the same academic course work to more than one course for credit without prior permission of the instructor(s)."
- All project text should be original text written by the student who is creating the project. The exception to this is the use of small amounts of quoted material that is properly cited. Copying and pasting from other Web sites or projects (including the instructor's examples) is not allowed.
- Images and graphics used in projects should be original, or used with permission of the owner, or come from the public domain. Please check "terms of use" on sites containing these items.
- Please cite the source(s) for materials that are obtained for your projects unless they are created by you. If permission is granted for use of copyrighted materials please post a statement explaining that near those materials.

I occasionally use Blackboard "Safe Assignment" and other plagiarism detection utilities to test random assignments. Contact me if you have any questions regarding this issue.

Thank you for abiding by the Course Policies.

**Technical Difficulties** – on occasion, you may experience problems with accessing Moodle or class files located within Moodle, with your Internet service, and/or other computer related problems. Do make the instructor aware if a technical problem prevents you from completing coursework.

BroncoMail - <http://helpdesk.boisestate.edu/email/broncomail/>

Moodle Resources

1. Moodle Tutorial tab on EDTECH moodle site (<http://edtech.mrooms.org/>)
2. Live Tech Support: <http://edtech.acrobat.com/support> (Friday through Tuesday from 6 - 8 pm Mountain Time.)

**Reasonable Accommodations** - Any student who feels s/he may need accommodations based on the impact of a disability should contact me privately to discuss your specific needs. You will also need to contact the Disability Resource Center at 208-426-1583 located in the Administration Building, room 114 to meet with a specialist and coordinate reasonable accommodations for any documented disability.

**Boise State's FERPA policy** - The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records.

<http://registrar.boisestate.edu/catalogs/ugrdcurrent/frontpages/chapter2/confidentiality.shtml>

# Conceptual Framework

## College of Education - The Professional Educator

Boise State University strives to develop knowledgeable educators who integrate complex roles and dispositions in the service of diverse communities of learners. Believing that all children, adolescents, and adults can learn, educators dedicate themselves to supporting that learning. Using effective approaches that promote high levels of student achievement, educators create environments that prepare learners to be citizens who contribute to a complex world. Educators serve learners as reflective practitioners, scholars and artists, problem solvers, and partners.

## Department of Educational Technology Mission

The Department of Educational Technology supports the study and practice of facilitating and improving learning of a diverse population by creating, using, managing, and evaluating appropriate technological processes and resources. Believing technology is a tool that enhances and expands the educational environment, we promote the use of current and emergent technologies for teaching and learning in a dynamic global society. Educational technologists are leaders and innovators, serving in institutions of higher education, public or private school settings, federal, state, or local educational agencies, and educational organizations in the private sector.

## AECT Standards

The assignments and activities in this course have been aligned to the *Standards for the Accreditation of School Media Specialist and Educational Technology Programs*:

<http://www.ncate.org/ProgramStandards/AECT/AECTstandardsREV2005.doc>

Standard	Assignment/Activities
STANDARD 3: UTILIZATION Candidates demonstrate the knowledge, skills, and dispositions to use processes and resources for learning by applying principles and theories of media utilization, diffusion, implementation, and policy-making.	
3.1 Media Utilization Media utilization is the systematic use of resources for learning.	Moodle: Online forum discussion  Endnote Web or other preferred reference management tools
3.2 Diffusion of Innovations Diffusion of innovations is the process of communicating through planned strategies for the purpose of gaining adoption.	Final Project: Chapter 1 and 2 of master's thesis (potential conference presentation)
STANDARD 4: MANAGEMENT Candidates demonstrate knowledge, skills, and dispositions to plan, organize, coordinate, and supervise instructional technology by applying principles of project,	

resource, delivery system, and information management.	
4.1 Project Management Project management involves planning, monitoring, and controlling instructional design and development projects.	Continuous effort of communication with instructors and peers through e-mail, IM, and online forum, regarding the Final Project
4.2 Resource Management Resource management involves planning, monitoring, and controlling resource support systems and services.	Online Q & A Forums for the course in general and assignments
4.3 Delivery System Management Delivery system management involves planning, monitoring and controlling 'the method by which distribution of instructional materials is organized' . . . [It is] a combination of medium and method of usage that is employed to present instructional information to a learner.	On distribution of research materials such as Annotated Bibliography and literature review drafts.
4.4 Information Management Information management involves planning, monitoring, and controlling the storage, transfer, or processing of information in order to provide resources for learning.	Endnote Web or other preferred reference management tools
STANDARD 5 EVALUATION Candidates demonstrate knowledge, skills, and dispositions to evaluate the adequacy of instruction and learning by applying principles of problem analysis, criterion-referenced measurement, formative and summative evaluation, and long-range planning.	
5.1 Problem Analysis Problem analysis involves determining the nature and parameters of the problem by using information-gathering and decision-making strategies.	Scaffolded through weekly discussions on research problems, concepts, designs, and tools.
5.3 Formative and Summative Evaluation Formative evaluation involves gathering information on adequacy and using this information as a basis for further development. Summative evaluation involves gathering information on adequacy and using this information to make decisions about utilization.	Providing and learning from (formative) peer feedback as part of the research community, to develop oneself as a critical consumer and producer of research.

### **Modification of the Syllabus and Schedule**

I reserve the right to modify the syllabus and schedule at any time. Notice of any change will be emailed and posted as an announcement.