



# Instructional Media & Technology

## EDETC 318

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**Additional Materials  
Instructional Media & Technology  
Kansas State University  
NECC Conference, 2005  
Philadelphia, PA**

**Print Materials**

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- Edyburn, D. L. (1999). The Electronic Scholar: Enhancing Research Productivity with Technology. New York: Prentice Hall.
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- Kearsley, G. (2000). Online Education: Learning and Teaching in Cyberspace. New York: Wadsworth.
- Lessig, L. (2001). The Future of Ideas. New York: Random House.
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- Waterhouse, S. (2005). *The Power of E-Learning: The Essential Guide for Teaching in the Digital Age*. New York: Pearson

## **Web**

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First Monday 4 (12) [http://www.firstmonday.dk/issues/issue4\\_12/hara/index.html](http://www.firstmonday.dk/issues/issue4_12/hara/index.html).

**Kansas State University-College of Education**  
**Instructional Media & Technology – Summer, 2005**

<http://bb.coe.ksu.edu/>

LOGIN: NECC PASSWORD: NECC

**State of Kansas Licensure**

<http://www.ksde.org/cert/cert.html>

**Survey tool to evaluate knowledge and attitude**

<http://profilerpro.com/>

**Searchable Collection of Case Studies of Actual K-12 Teacher Applications of Technology**

<http://kite.missouri.edu/>

**Survey of Students in Their First Semester of Teaching Experience in K-12 schools**

(True = 1 Mostly True = 2 Mostly False= 3 False =4)

(Higher Aver. = Greater falsity)

<b>Question</b>	<b># True</b>	<b># Mostly True</b>	<b># Mostly False</b>	<b># False</b>	<b>Average</b>
<b>1. The school I am doing my student teaching in has digital technologies in the classroom.</b>	13	15	2	5	<b>1.97</b>
<b>2. The school I am doing my student teaching in has networked digital technologies in the classroom.</b>	18	10	5	2	<b>1.74</b>
<b>3. I have observed my cooperating teacher using digital technologies in their <u>professional role</u>.</b>	22	7	4	2	<b>1.60</b>
<b>4. I have observed my cooperating teaching using digital technologies in their <u>teaching</u> role.</b>	15	8	8	4	<b>2.03</b>
<b>5. I have observed my cooperating teacher expecting student assignment that have digital technology components.</b>	11	8	10	6	<b>2.31</b>
<b>6. I have had opportunities in my student teaching experience to use digital technologies in my professional role.</b>	16	13	4	2	<b>1.77</b>
<b>7. I have had opportunities in my student teaching experience to use digital technologies in my teaching role.</b>	16	11	6	2	<b>1.83</b>
<b>8. I have made student assignment that involve digital technology components.</b>	12	10	8	5	<b>2.17</b>
<b>9. My cooperating teacher has been able to provide me with effective guidance concerning the use of digital technologies in the classroom.</b>	9	10	13	3	<b>2.29</b>
<b>10. My cooperating teacher has demonstrated ethical use of technologies in the classroom</b>	23	4	5	3	<b>1.66</b>
<b>11. My cooperating teacher has expected ethical use of technologies from students in the classroom</b>	26	6	2	1	<b>1.37</b>

=====**Check**  
**all the following digital**  
**technologies that have been**  
**available for you to use in your**  
**supervised teaching**  
**experience.=====**

<b>Desktop Computer</b>	32
<b>Classroom Printer</b>	28
<b>E-mail</b>	29
<b>Elmo</b>	6
<b>Digital Camera</b>	19
<b>Laptop Computer</b>	16
<b>School Network</b>	30
<b>World Wide Wide</b>	29
<b>Computer Lab</b>	28
<b>Digital Camcorder</b>	7
<b>Graphic Calc.</b>	8
<b>CD Player</b>	22
<b>CD Burner</b>	10
<b>DVD</b>	19
<b>SmartBoard</b>	12
<b>Other</b>	Palm Pilot Classroom Wizard Laser Disc

<b>Placement</b>	<b>11 Middle School</b>	<b>24 High School</b>			
<b>Placement</b>	<b>History</b> 11	<b>Science</b> 5	<b>Math</b> 1	<b>Art</b> 3	<b>Social Studies</b> 3
	<b>Lang. Arts.</b> 7	<b>For. Lang.</b> 1	<b>Ag.</b> 3	<b>Business</b> 1	

**Student Perceptions of their Technology Preparation at KSU-COE  
2000-2003  
Source OEIE**

**Higher # = Greater Perceived strength or degree of emphasis.**

**Spring 2000**

<b>Table 2:</b>	<i>Program Perceived Strength or Weakness</i>	<b>Elementary</b>	<b>Secondary</b>	<b>K-12</b>	<b>Total</b>
	<b>12)Instructional media, computers and technology</b>				
	mean	1.96	1.95	1.67	1.94
	median	2.00	2.00	2.00	2.00
	standard deviation	0.73	0.76	0.52	0.73
	number of respondents	50.00	39.00	6.00	95.00

<b>Table 3:</b>	<i>Recommendations for Degree of Emphasis</i>	<b>Elementary</b>	<b>Secondary</b>	<b>K-12</b>	<b>Total</b>
	<b>12)Instructional media, computers and technology</b>				
	mean	2.63	2.62	2.33	2.60
	median	3.00	3.00	2.00	3.00
	standard deviation	0.49	0.55	0.52	0.51
	number of respondents	48.00	37.00	6.00	91.00

**Fall 2001**

<b>Table 2:</b>	<i>Program Perceived Strength or Weakness</i>	<b><u>Elementary</u></b>	<b><u>Secondary</u></b>	<b><u>K-12</u></b>	<b><u>Total</u></b>
	<b>12)Instructional media, computers and technology</b>				
	mean	1.62	1.71	2.67	1.68
	median	2.00	2.00	3.00	2.00
	standard deviation	0.65	0.78	0.58	0.70
	number of respondents	66.00	21.00	3.00	90.00

<b>Table 3:</b>	<i>Recommendations for Degree of Emphasis</i>	<b><u>Elementary</u></b>	<b><u>Secondary</u></b>	<b><u>K-12</u></b>	<b><u>Total</u></b>
	<b>12)Instructional media, computers and technology</b>				
	mean	2.50	2.33	2.33	2.45
	median	3.00	2.00	2.00	3.00
	standard deviation	0.59	0.66	0.58	0.61
	number of respondents	62.00	21.00	3.00	86.00

**Fall 2002**

<b>Table 2:</b>	<i>Program Perceived Strength or Weakness</i>	<b><u>M.S.</u></b>	<b><u>Ph.D.</u></b>	<b><u>Ed.D.</u></b>	<b><u>Total</u></b>
	<b>12)Instructional media, computers and technology</b>				
	mean	2.67	2.40	3.00	2.66
	median	3.00	3.00	3.00	3.00
	standard deviation	0.52	0.89		0.54
	number of respondents	51.00	5.00	3.00	59.00

<b>Table 3:</b>	<i>Recommendations for Degree of Emphasis</i>	<b><u>M.S.</u></b>	<b><u>Ph.D.</u></b>	<b><u>Ed.D.</u></b>	<b><u>Total</u></b>
	<b>12)Instructional media, computers</b>				

<b>and technology</b>				
mean	2.10	2.40	2.00	2.12
median	2.00	2.00	2.00	2.00
standard deviation	0.30	0.55		0.33
number of respondents	50.00	5.00	3.00	58.00

**Spring 2003**

<b>Table 2:</b>	<i>Program Perceived Strength or Weakness</i>	<b>Elementary</b>	<b>Secondary</b>	<b>K-12</b>	<b>Total</b>
	<b>12)Instructional media, computers and technology</b>				
	mean	1.87	2.00	2.25	1.93
	median	2.00	2.00	2.00	2.00
	standard deviation	0.65	0.76	0.50	0.68
	number of respondents	79.00	43.00	4.00	126.00

<b>Table 3:</b>	<i>Recommendations for Degree of Emphasis</i>	<b>Elementary</b>	<b>Secondary</b>	<b>K-12</b>	<b>Total</b>
	<b>12)Instructional media, computers and technology</b>				
	mean	2.30	2.44	2.00	2.34
	median	2.00	2.00	2.00	2.00
	standard deviation	0.64	0.55		0.61
	number of respondents	80.00	43.00	4.00	127.00

**Advanced EDETC 318  
Part of a PT<sup>3</sup> Implementation Grant.**

This was an effort to pair students with proficient basic technology skills in collaborative environments with practicing K-12 teachers from the College of Education professional development schools. Twenty self-selected students who could demonstrate technology skills were placed in a special section of 318 and working with local K-12 teachers and university technology experts to develop classroom modules. The program was not continued because of difficulties in staffing and scheduling.

Evaluator's Summary

On the Technology Proficiency Survey, students reported statistically significant improvements in their skills in the following areas between the pre- and post-test: Presentation Software; Spreadsheets; Use of Operating System; Installation of Application Software; Installation of System Software; Synchronous Communication Tools; Use of Acrobat to Download Information; Creation of Acrobat pdf.files; Connect and Program a VCR; Use of a Scanner; Use of a Digital Camera; Use of PhotoCD; Digitize a Video Clip; Record an Audio File; Reduce, Enlarge, or Crop a Graphic; Convert Graphics; Use of Multimedia in the Classroom; How to Critique the Use of Computers in the Classroom. Students also reported a statistically significant improvement in their confidence to help others solve technology problems. These findings should be viewed in light of the fact that 93% of the students agreed or strongly agreed that they felt confident in their ability to use technology on the pre-survey.

On the initial project logs, students reported that they had high expectations for the 318B course. They indicated that they were excited about the opportunity to have a hands-on technology experience, and yet some were also a little apprehensive about what they did not know about technology and about applying it in the classroom. Coinciding with the Technology Proficiency Pre-Survey, almost all students reported in the initial project logs that they were comfortable with technology and had a positive attitude toward technology and learning new technology. The project logs that were administered after the one-month training were fairly divergent, based upon the technology expert that was involved in the training. In general and for both technology experts, students had positive comments about their training. Some students wanted more time with the technology expert, including more structure and clarity in the training. Other students recommended keeping the same structure in the training. In the final project logs many students reiterated similar viewpoints that were expressed in previous project logs. In general, students were pleased with their work on the technology project. Some students indicated that the project was too ambitious, may still need some work, or that they did not use technology in a way they thought would.

**EDETC 318 Syllabus  
Kansas State University  
Fall, 2005**

**On-Line: K-State On Line**

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**Instructional Media & Technology**

**Course Synopsis**

This undergraduate course deals with developing skills necessary to integrate modern digital teaching technologies into the skill base of practicing graduates who are seeking initial certification as an Elementary or Secondary Teacher. Two particular thrusts dominate in this course: 1) developing a set of skills using digital and media technology and 2) integrating technology skills into the teaching of content. As a broad overview, this course seeks to ensure that students will initially master those skills necessary to be successful in their professional coursework within the College of Education and subsequently build on these skills to integrate them into their teaching practice beyond graduation.

**Required Text**

Lever-Deffy, J., McDonald, J. B. & Mitzel, A. P. (2005). Pearson Education. New York.

**College of Education Mission**

The College of Education is dedicated to its vision of preparing educators be knowledgeable, ethical, caring decision makers through excellence in the: delivery of exemplary instruction to students at the undergraduate and graduate levels; production, interpretation, and dissemination of sound and useful research and scholarships; and provision of leadership, collaboration, and service within the profession.

**Conceptual Framework**

The Conceptual Framework serves as a guide for fulfilling the College of Education's vision of preparing educators to be knowledgeable, ethical, caring decision makers, and

supports the university and college missions focusing on the development of a skilled workforce through teaching, research and service. The Conceptual Framework acknowledges the contribution of general education, content area studies, and professional studies to the preparation of educators, and organizes professional studies into four broad categories:

- (1) Perspectives and Preparation;
- (2) Learning Environment;
- (3) Instruction;
- (4) Professionalism.

## Goals

The College of Education has organized its conceptual framework into four broad categories: Perspectives and Preparation; Learning Environments; Instruction; and Professionalism, all designed to prepare students to meet the Technology Exit Outcomes for KSU-COE of Teachers in their professional classes. Additionally, the ISTE consortium defined National Education Technology Standards that all classroom teachers should meet: The College of Educations four categories are associated with the ISTE Standards and are shown below in boldface.

These six standards are:

1. Technology Operations and Concepts: Teachers demonstrate a sound understanding of technology operations and concepts. **INSTRUCTION**
2. Planning and designing learning environments and experiences: Teachers plan and design effective learning environments and experiences supported by technology. **PERSPECTIVES AND PREPARTION**
3. Teaching, learning and the curriculum: Teachers implement curriculum plans that include methods and strategies for applying technology to maximize student learning. **INSTRUCTION/LEARNING ENVIRONMENT**
4. Assessment and Evaluation: Teachers apply technology to facilitate a variety of effective assessment and evaluation strategies. **PERSPECTIVES AND PREPARTAION/LEARNING ENVIRONMENT/INSTRUCTION**
5. Productivity and professional practices: Teachers use technology to enhance their productivity and professional practice. **PROFESSIONALISM**
6. Social, ethical, legal and human issues: Teachers understand the social, ethical, legal and human issues surrounding the use of technology in PK-12 schools and apply that understanding in practice. **PROFESSIONALISM/PERSPECTIVES AND PREPARATION**

The goals of this course are designed to parallel the standards developed by the ISTE consortium.

## Introduction

The Technology Exit Outcomes for KSU-COE pre-service teachers are designed to meet the International Society for Technology Education (ISTE) standards for teachers. Perhaps no change has been more fundamental than the change from viewing digital technology as an esoteric topic of study, to understanding that technology integration is a fundamental skill required of all teachers. Teachers require these skills in order to ensure students master the content required by their field of study, practice higher order thinking skills and possess information literacy.

The professional literature of technology education has made substantial changes in the past decade. Digital technologies and their application to the teaching of content have made great strides and undergone sweeping changes. To define this rapidly evolving field, the International Society for Technology Education formed a coalition to define the “candidate knowledge, skills and dispositions,” relative to technology. This project coalition included:

American Association of School Librarians  
American Federation of Teachers  
Association for Supervision and Curriculum Development  
The Council for Exceptional Children  
Council of Chief State School Officers  
National Association of Elementary Principals  
National Association of Secondary Principals  
National Education Association  
National Foundation for the Improvement of Education  
National School Board Association  
Software Information Industry Association

## Audience

The primary audience for this course is pre-service teachers in their first semester of professional coursework in the College of Education-Kansas State University.

## Pre-requisites

It is assumed that students enrolling in EDETC 318 will understand basic computer operations as outlined by admission requirements to Regent’s Universities; “...computer literacy including a basic understanding of computer operations, applications and programming.” (KSA 76-717 Implementation of Qualified Admissions, Article B).

Students who do not have the basic computer literacy skills, as outlined above, are encouraged to enroll in CS 101, 102, 103 or other remedial programs prior to enrolling in EDETC 318.

## Assignments

**You have been assigned an instructional advisor according to the first letter of your last name. You will send your assignments to this individual with your KSU email account:**

**Tweed Ross (BH 16G)**

**Huiming Lu (BH 334)**

**GTA – TBA**

**GTA -- TBA**

## General

1. Regular and prompt completion of all assignments.
2. Active participation in online work with a heavy responsibility for individual effort and time management.
3. Completion of required readings, and observation of online demonstrations, power points.
4. Successful completions of all exams, projects and demonstrations.
5. Regular use of MS Office applications and common Internet browsers is expected. Students choosing to use other application software will be expected to submit assignments in formats readable by MS Office software.
6. Regular checking of email and on-line announcements is expected.

## Assignment Policy

- Students will submit all assignments electronically via the course site.
- Depending on specific directions relative to the assignment, many will be submitted to the instructional advisor via e-mail. The subject line of the e-mail must include “EDETC 318.” If the assignment involved is submitted as an attachment it the name of the assignments must be in the following format: the student’s last name, name of the assignment, and “dot-three” extension. No work failing to comply with these requirements will be graded.
- All assign due dates refer to midnight CST on the listed due date. Late assignments will not be accepted.
- Your instructional advisor will review assignments within 72 hours of the date you submit the assignment. You must refer to the K-State OnLine gradebook in the course site to determine the grade you earned on each assignment. **DO NOT** try to determine your grade by sending e-mail or calling your instructional advisor.
- If you need to discuss your grade or feedback you received from your instructional advisor on an assignment, make an appointment with your instructor. This may be done in a visit during published office hours, via e-mail or phone contact.

- Students are responsible for keeping a copy of all submitted assignments. Absent a copy of a work in question, no grade change or credit for a missing assignment is possible.
- Students must ensure that all assignment files are free of viruses before submitting them. Keep your virus detection software up-to-date. Should an assignment fail scrutiny by K-State's standard virus detection software the student submitting it will be advised via e-mail to their K-State account. A virus-free version of the file must be resubmitted within the posted date of the assignment due date. Any subsequent failure to adhere to this requirement will cause an assignment to be unacceptable. Antivirus protection software for all K-State students is available free at <http://antivirus.ksu.edu/>
- If an assignment is not accepted because of virus protection failure or not sent to the instructional advisor within the assignment due date a "0" grade will be recorded for that assignment.

### Grades

#### **Activity Assignments --20% of the grade**

- Week 1-Survey (3 points)
- Week 2-Discussion Board (3 points)
- Week 3-Electronic Communication (3 points)
- Week 6-Web Evaluation (6 points)
- Week 7-Excel Spreadsheets (5 points)

#### **Projects --25% of the grade**

- Project #1 (15 points)
- Project #2 (10 points)

#### **Exams --30% of the grade**

- Exam #1, 12 question multiple choice + 3 pt. skills demonstration (15 points)
- Exam #2, 12 question multiple choice + 3 pt. skills demonstration (15 points)

#### **Final Exam --25% of the grade**

- 22 question multiple choice +3 pt. skills demonstration (25 points)

### Grading Scale

- 90-100 points = A
- 80-89 points = B
- 70-79 points = C
- 60-69 points = D
- Less than 60 = F

Unless there are truly EXCEPTIONAL, IMPOSSIBLE TO FORESEE, AND UNIQUE circumstances an Incomplete is **NOT** an option in this course.

## Copyright

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## Academic Honesty

“Plagiarism and cheating are serious offenses and may be punished by failure on the exam, paper or project, failure in the course and/or expulsion from the university.”

For more information students are encouraged to review the Kansas State University honor code policies at <http://www.ksu.edu/honor/> or the Student Rights and Responsibilities Section of the Campus Phone Book.

**“On all assignments, examinations, or other course work undertaken by students in this class, the following pledge is implied, whether or not it is stated: ‘On my honor, as a student, I have neither given nor received unauthorized aid on this academic work.’”**

## Disability

If you have any condition, such as a physical or learning disability, which will make it difficult for you to carry out the outlined work or which will require academic accommodation, please notify me immediately.