EDST 635

California State University San Marcos • **COURSE CHANGE(S)** • FORM C-2

ORIGINATOR'S SECTION:	
1. College: ☐ CHABSS ☐ CoBA ☒ CoEHHS ☐ CSM	Desired Term and Year of Implementation (e.g., Fall 2008): FALL 2016
2. Current Course abbreviation and Number: EDST635	

RECEIVED
MAR 29 2016
BY:

TYPE OF CHANGE(S). Check √ all that apply.

Course Number Change	☒	Delete Prerequisite	☐	Other Prerequisite Change	☐
Course Title Change	☒	Add Corequisite	☐	Grading Method Change	☐
Unit Value Change	☐	Delete Corequisite	☐	Mode of Instruction Change (C/S Number)	☐
Description Change	☒	Add Consent for Enrollment	☐	Consider for G.E. If yes, also fill out appropriate GE form.	☐
Add Prerequisite	☐	Delete Consent for Enrollment	☐	Cross-list	☐

Information in this section– both current and new – is required only for items checked (√) above.

CURRENT INFORMATION:	NEW INFORMATION:
	Course abbreviation and Number: EDT635
3. Title: **Hardware Operations and Functions to Support Teaching and Learning**	Title: *(Titles using jargon, slang, copyrighted names, trade names, or any non-essential punctuation may not be used.)* ~~Introduction to Computational Thinking and Programming~~ Coding for Educators.
4. Abbreviated Title for Banner *(no more than 25 characters):*	Abbreviated Title for PeopleSoft: *(no more than 25 characters, including spaces)* ~~Intro to~~ Computing & Prog for Educ.
5. Number of Units:	Number of Units:
6. Catalog Description: **Prepares educators to use computer and software resources and settings to support student needs. Includes universal access issues, tools, and important copyright law.**	Catalog Description: *(Not to exceed 80 words; language should conform to catalog copy. Please consult the catalog for models of style and format; include all necessary information regarding consent for enrollment, pre- and/or corequisites, repeated enrollment, crosslisting, as detailed below. Such information does not count toward the 80-word limit.)* Covers **~~Prepares educators to develop basic understanding of~~ computational thinking and programming to support 21st century teaching and learning.**

7. Mode of Instruction* *(See pages 17-23 at http://www.calstate.edu/cim/data-elem-dic/APDB-Transaction-DED-SectionV.pdf for definitions of the Course Classification Numbers)*

Type of Instruction	Number of Credit Units	Instructional Mode (Course Classification Number)
Lecture		
Activity		
Lab		

Type of Instruction	Number of Credit Units	Instructional Mode (Course Classification Number)
Lecture		
Activity		
Lab		

8. Grading Method:*
- ☐ Normal (N) *(Allows Letter Grade +/-, and Credit/No Credit)*
- ☐ Normal Plus Report-in-Progress (NP) *(Allows Letter Grade +/-, Credit/No Credit, and Report-in-Progress)*
- ☐ Credit/No Credit Only (C)
- ☐ Credit/No Credit or Report-in-Progress Only (CP))

Grading Method:*
- ☐ Normal (N) *(Allows Letter Grade +/-, and Credit/No Credit)*
- ☐ Normal Plus Report-in-Progress (NP) *(Allows Letter Grade +/-, Credit/No Credit, and Report-in-Progress)*
- ☐ Credit/No Credit Only (C)
- ☐ Credit/No Credit or Report-in-Progress Only (CP))

*If Originator is uncertain of this entry, please consult with Program Director/Chair.

CURRENT INFORMATION:	NEW INFORMATION:
9. If the NP or CP grading system was selected, please explain the need for this grade option.	
10. Course Requires Consent for Enrollment? ☐ Yes ☐ No ☐ Faculty ☐ Credential Analyst ☐ Dean ☐ Program/Department/Director/Chair	**Course Requires Consent for Enrollment?** ☐ Yes ☐ No ☐ Faculty ☐ Credential Analyst ☐ Dean ☐ Program/Department/Director/Chair
11. Course Can be Taken for Credit More than Once? ☐ Yes ☐ No If yes, how many times (including first offering)	**Course Can be Taken for Credit More than Once?** ☐ Yes ☐ No If yes, how many times (including first offering)
12. Is Course Cross Listed: ☐ Yes ☐ No If yes, indicate which course	**Is Course Cross-listed?** ☐ Yes ☐ No If yes, indicate which course and check "yes" in item #17 below.
13. Prerequisite(s):	**Prerequisite(s):**
14. Corequisite(s):	**Corequisite(s):**
15. Documentation attached: ☒ Syllabus ☐ Detailed Course Outline	

PROGRAM DIRECTOR/CHAIR - COLLEGE CURRICULUM COMMITTEE SECTION:
(Mandatory information – all items in this section must be completed.)

16. Does this course fulfill a requirement for any major (i.e. core course or elective for a major, majors in other departments, minors in other departments? ☒ **Yes** ☐ **No**
If yes, please specify:
Educational Technology Certificate

17. Does this course change impact other discipline(s)? ***(If there is any uncertainty as to whether a particular discipline is affected, check "yes" and obtain signature.)*** Check "yes" if the course is cross-listed. ☐ **Yes** ☒ **No**
If yes, obtain signature(s). Any objections should be stated in writing and attached to this form.

CS Discipline	see email Signature	5/14/16 Date	✓ Support	____ Oppose
MIS Discipline	see email Signature	5/13/16 Date	✓ Support	____ Oppose

18. Reason(s) for changing this course:

The reason of the course abbreviation change is so that "Educational Technology" can be created as a course search category in PeopleSoft for students to easily find the Educational Technology courses. Technology has changed drastically and hardware is no longer relevant to educators. The focus is on computational thinking and programming due to the relevance of software applications. The goal of changing the course title, and the description is to update the course to 21st century standards and provide a clear description of the course content.

SIGNATURES : (COLLEGE LEVEL) :

1. Originator (Please Print) Sinem Siyahhan — Date 02/07/2016
2. Program Director/Chair — Date 2-7-16
3. College Curriculum Committee — Date 3-14-16
4. College Dean (or Designee) — Date 3/14/16

(UNIVERSITY LEVEL)

5. UCC Committee Chair — Date
6. Vice President for Academic Affairs (or Designee) — Date
7. President (or Designee) — Date

Virginia Mann CS support

From: Youwen Ouyang
Sent: Saturday, May 14, 2016 4:46 PM
To: Suzanne Moineau; Fang Fang; Virginia Mann; Sinem Siyahhan; Amy Armstrong
Cc: Regina Eisenbach
Subject: RE: CS Sign-off

Dear all,

I'd like to first apologize for the delay in reviewing and responding. I was finally able to spend some time with it this morning (Malaysia time) with a refreshed mind to carefully review the syllabus and provide feedback.

I am very excited about the opportunity this courser presents for future teachers and its potential long term impact on education. The only request I have is for the title of the course to be aligned with the content and specific target audience. The project activities and readings identified in the syllabus are very specific about computational thinking in the context of K-12 classrooms. The journaling process throughout the course also engages students in their reflection on computational thinking to support teaching and learning.

Best,
Youwen

From: Suzanne Moineau
Sent: Friday, May 13, 2016 10:24 AM
To: Fang Fang <fangfang@csusm.edu>; Youwen Ouyang <ouyang@csusm.edu>; Virginia Mann <vmann@csusm.edu>; Sinem Siyahhan <ssiyahhan@csusm.edu>; Amy Armstrong <aarmstrong@csusm.edu>
Cc: Regina Eisenbach <regina@csusm.edu>
Subject: Re: CS Sign-off

Much thanks, Fang Fang!

Best,
Sue

Suzanne Moineau, Ph.D., CCC/SLP
Associate Professor
Chair, Department of Speech-Language Pathology
College of Education, Health and Human Services
California State University San Marcos
333 S. Twin Oaks Valley Road
San Marcos, CA 92096
760.750.8505
smoineau@csusm.edu
http://www.csusm.edu/slp/

Virginia Mann

EDST 635
MIS support

Subject: FW: CS Sign-off

From: Fang Fang
Sent: Friday, May 13, 2016 10:11 AM
To: Suzanne Moineau <smoineau@csusm.edu>; Youwen Ouyang <ouyang@csusm.edu>; Virginia Mann <vmann@csusm.edu>; Sinem Siyahhan <ssiyahhan@csusm.edu>; Amy Armstrong <aarmstrong@csusm.edu>
Cc: Regina Eisenbach <regina@csusm.edu>
Subject: Re: CS Sign-off

Hi, Suzanne and Sinem,

Sorry about the delay. MIS has decided to approve the signoff.

Best regards,
Fang Fang

Fang Fang, Associate Professor & Chair, Department of MIS
Faculty Advisor, MIS Society
College of Business Administration
California State University San Marcos
333 S Twin Oaks Valley Rd.
San Marcos, CA 92096-0001
fangfang@csusm.edu

On May 3, 2016, at 1:48 PM, Virginia Mann <vmann@csusm.edu> wrote:

Hello (again) Youwen,

UCC has received the course change proposal below from the School of Education, and requests that CS review and let us know if you have any comments or concerns.
Thank you.

Virginia

44	EDST 635 - Hardware Operations/Functions	C-2

Virginia Mann

From: Sinem Siyahhan
Sent: Sunday, May 15, 2016 9:49 PM
To: Suzanne Moineau
Cc: Virginia Mann; Regina Eisenbach
Subject: Re: CS Sign-off
Attachments: EDT643New.doc; ATT00001.htm; EDT644New.doc; ATT00002.htm

Hi Sue,

I responded to Youwen. Do we have to wait for her response, again?

I propose to change the title of the course to "Computational Thinking and Coding for Educators" per her feedback, and I believe this addresses her concern.

I am attaching the revised SLOs for EDT643 and EDT644. Do I need to do anything for EDT635?

Thank you so much for your help!

Best,
Sinem

NEW

California State University
SAN MARCOS
SCHOOL OF EDUCATION

Engaging diverse communities through leading and learning for social justice.

333 South Twin Oaks Valley Road, University Hall 468
San Marcos, California 92096-0001
760.750.4300
www.csusm.edu/soe

Course Number	**EDT 635**
Course Title	**Introduction to Computational Thinking and Programming**
CRN	
Course Location	
Semester / Year	
Instructor	
Phone	
E-Mail	
Office	
Hours	

SCHOOL OF EDUCATION MISSION & VISION STATEMENT

(Adopted by SOE Governance Community, January 2013)

Vision

To serve the educational needs of local, regional, and global communities, the School of Education advances innovative practice and leadership by generating, embracing, and promoting equitable and creative solutions.

Mission

The mission of the School of Education community is to collaboratively transform education. We:

- Create community through partnerships
- Promote and foster social justice and educational equity
- Advance innovative, student-centered practices
- Inspire reflective teaching and learning
- Conduct purposeful research
- Serve the School, College, University, and Community

BASIC TENETS OF OUR CONCEPTUAL FRAMEWORK

- Student centered education
- Research and theory specific to the program field inform practice
- Connections and links between coursework and application
- Strong engagement between faculty and candidates
- Co-teaching clinical practice
- Culturally responsive pedagogy and socially just outcomes

COURSE DESCRIPTION

Catalog Description:

Prepares educators to develop basic understanding of computational thinking and programming to support 21set century teaching and learning.

Introduction to Computational Thinking and Programming

This 3-unit course is designed as part of the Educational Technology Certificate Program.

Graduate Credit

This is a graduate level course, and successful completion can be applied toward the Masters' in Education General Option.

Credit Hour Policy Statement

Per the University Credit Hour Policy, students are expected to spend a minimum of six hours outside of the classroom each week.

REQUIRED TEXTS, MATERIALS AND/OR ACCOUNTS

For Programming Activities:

- **Codesters:** You will receive a class key code that will allow you to sign up for www.codesters.com
- **Scratch:** You will need to sign up for a free account at www.scratch.mit.edu
- **Code.Org:** You will need to sign up for a free account at www.code.org
- **Codecamy:** You will need to sign up for a free account at www.codesters.com

Reading List:

- Wing, J. (2006). Computational thinking. Available at: https://www.cs.cmu.edu/~15110-s13/Wing06-ct.pdf
- Barr, D., Harrison, J. & Conery, L. (2011). Computational thinking: a digital age skill for everyone. Available at: http://www.csta.acm.org/Curriculum/sub/CurrFiles/LLCTArticle.pdf
- CT Teacher Resources. Available at: http://www.iste.org/docs/ct-documents/ct-teacher-resources_2ed-pdf.pdf?sfvrsn=2
- Prottsman, K. (2014). 3 best practices of pair programming. Available at: https://www.iste.org/explore/articleDetail?articleid=221&category=In-the-classroom&article=3+best+practices+for+pair+programming
- Czerkawski, B. (2015). Coding is cool, but what about teacher education and effective curriculum design? Available at: http://www.etr.org/blog/my-take-cool-code/
- Sykora, C. (2014). Computational thinking for all. Available at: https://www.iste.org/explore/articledetail?articleid=152

COURSE LEARNING OUTCOMES

Upon successful completion of this course, students will (be able to):

- use a form of reasoning, or problem solving, called Computational Thinking (CT),
- understand what a computer can do and the primitive operations it can perform,
- design simple algorithms,
- use a subset of programming applications and languages.

GENERAL CONSIDERATIONS

School of Education Attendance Policy

Due to the dynamic and interactive nature of courses in the School of Education, course participants are expected to attend all classes and participate actively. At a minimum, course participants must attend more than 80% of class time, or s/he may not receive a passing grade for the course at the discretion of the instructor. Individual instructors may adopt more stringent attendance requirements. Should the students have extenuating circumstances, s/he should contact the instructor as soon as possible.

CSUSM Academic Honesty Policy:

Students will be expected to adhere to standards of academic honesty and integrity, as outlined in the Student Academic Honesty Policy. All assignments must be original work, clear and error-free. All ideas/material that are borrowed from other sources must have appropriate references to the original sources. Any quoted material should give credit to the source and be punctuated accordingly.

Academic Honesty and Integrity: Students are responsible for honest completion and representation of their work. Your course catalog details the ethical standards and penalties for infractions. There will be zero tolerance for infractions. If you believe there has been an infraction by someone in the class, please bring it to the instructor's attention. The instructor reserves the right to discipline any student for academic dishonesty, in accordance with the general rules and regulations of the university. Disciplinary action may include the lowering of grades and/or the assignment of a failing grade for an exam, assignment, or the class as a whole.

Incidents of Academic Dishonesty will be reported to the Dean of Students. Sanctions at the University level may include suspension or expulsion from the University.

Refer to the full Academic Honesty Policy at:
http://www.csusm.edu/policies/active/documents/Academic_Honesty_Policy.html

Plagiarism

Plagiarism or cheating is unacceptable under any circumstances. If you are in doubt about whether your work is paraphrased or plagiarized see the Plagiarism Prevention for Students website http://library.csusm.edu/plagiarism/index.html. If there are questions about academic honesty, please consult the University catalog.

Students with Disabilities Requiring Reasonable Accommodations:

Students with disabilities who require reasonable accommodations must be approved for services by providing appropriate and recent documentation to the Office of Disable Student Services (DSS). This office is located in Craven Hall 4300, and can be contacted by phone at (760) 750-4905, or TTY (760) 750-4909. Candidates authorized by DSS to receive reasonable accommodations should meet with their instructor during office hours or, in order to ensure confidentiality, in a more private setting.

All University Writing Requirement

The All-University Writing Requirement of 2500 words for a 3-unit course is satisfied through assignments that involve writing online text and discussion forums.

Use of Technology

Students need to have access to a computer with Internet connection. Students are expected to demonstrate competency in the use of various forms of technology (i.e. Google Apps, E-mail, Moodle, and/or multimedia presentations). All assignments will be submitted online through Cougar Courses.

Electronic Communication Protocol

Electronic correspondence is a part of your professional interactions. If you need to contact the instructor, e-mail is often the easiest way to do so. It is my intention to respond to all received e-mails in a timely manner. Please be reminded that e-mail and on-line discussions are a very specific form of communication, with their own nuances and etiquette. For instance, electronic messages sent in all upper case (or lower case) letters, major typos, or slang, often communicate more than the sender originally intended. With that said, please be mindful of all e-mail and on-line discussion messages you send to your colleagues, to faculty members in the School of Education, or to persons within the greater educational community. All electronic messages should be crafted with professionalism and care.
Things to consider:

- Would I say in person what this electronic message specifically says?
- How could this message be misconstrued?
- Does this message represent my highest self?
- Am I sending this electronic message to avoid a face-to-face conversation?

In addition, if there is ever a concern with an electronic message sent to you, please talk with the author in person in order to correct any confusion.

COURSE REQUIREMENTS AND GRADED COURSE COMPONENTS

Grading Policy

It is expected that all required work will be submitted on time, and that students will proofread and edit their assignments prior to submission to meet the expectations for each assignment.

Final Exam Statement

There is no final exam for this course.

Policy on Late Work

Assignments are due by midnight on the date specified. Late assignments will receive a penalty of 5% per day. Students must submit all assignments at an acceptable level to pass the course.

Cougar Course Help

Contact the CSUSM help desk at helpdesk@csusm.edu for questions, technical issues with accessing files, and support for using the tools in Cougar Course. Student resources and login for Cougar Courses: http://cc.csusm.edu/

Course Assignments:

Pair Programming: Students will work on a design challenge with a fellow student in class and engage in pair programming—a technique programmers use to collaboratively work on coding. Student pairs will choose to edit and further develop the following project in Scratch to create a digital story: https://scratch.mit.edu/projects/29321004/#editor. Pairs must add at least one more sprite to the story, and utilize Motion, Looks, Sound, Events, and Control in their design. One person will take the role of the driver and one person will take the role of the navigator.

Journaling: Throughout the course, you will reflect on your learning and journal. Students should address the following questions in their journals: (1) How is your understanding of computational thinking and programming evolving or changing? (2) How are you developing confidence in learning and teaching computational thinking and programming?, and (3) What are some challenges, difficulties, or barriers you have experienced? Each students will have a total of four journal entries.

Final Project: For their final project, students will create a game, a digital story, or an app in Code.org, Scratch, or an application of their choice. Students' design should address a learning goal and identify the targeted age group.

Grading Scale

A = 93-100	A -= 90-92	B+ = 86-89	B = 83-86
B- = 80-82	C+ = 77-79	C = 73-76	C- =70-72
D = 60-69	F = 59 or lower		

Distribution of Points per Assignment

Assignment	**Points**
Pair Programming	40
Journaling	40
Final Project	80
Total Points:	160

Course Schedule

Week	Topic	Readings & Assignments
1	Introduction	**Discussion Forum Post: Introduce Yourself** • Initial Post • 2 Peer Posts
2	What is Computational Thinking?	**Watch:** Jeannette Wing on Computational Thinking **Read:** Wing (2006) Barr, Harrison, & Conery (2011) **Discussion Forum Post:** • Initial Post • 2 Peer Posts
3	CT Core Concepts and Skills	**Read:** CT Teacher Resources (pp. 1-23) **Discussion Forum Post:** • Initial Post • 2 Peer Posts
4	Algorithms, Debugging, & Loops	**Activity:** Complete "Course 1 (Ages 4-6)" on Code.Org

Week	Topic	Readings & Assignments
5	Introduction to Pair Programming	**Read:** Prottsman (2014) **Discussion Forum Post:** • Initial Post • 2 Peer Posts
6	Abstraction & Problem Decomposition	**Activity:** Complete "Course 3 (All Ages)" on Code.org **Assignment:** Journal Entry#1
7	Introduction to Scratch	**Read:** Computational Thinking with Scratch **Assignment:** Pair Programming
8	Introduction to Codesters	**Activity:** Complete "Introduction to Codesters" on Codesters.com **Assignment:** Journal Entry#2
9	Teaching CT and Programming	**Reading:** Czerkawski (2015) **Discussion Forum Post:** • Initial Post • 2 Peer Posts
10	Introduction to HTML	**Activity:** Complete "HTML & CSS Course: Unit 1 Introduction to HTML" on Codecademy.com
11	Introduction to CSS	**Activity:** Complete "HTML & CSS Course: Unit 4 Introduction to CSS" on Codecademy.com **Assignment:** Journal Entry#3
12	Computational Leadership	**Read:** Sykora (2014) **Discussion Forum Post:** • Initial Post 2 Peer Posts
13	Final Project	**Assignment:** Journal Entry#4
14	Final Project	
15	Final Project	**Assignment:** Final Project
16	NO FINAL EXAM	

OLD

Cal State San Marcos FALL 2007

EDST E635 E01: (3 units)

CRN: 42746

"Hardware Operations and Functions to Support Teaching and Learning"

Note: This course also focuses on *universal access issues and tools and copyright law.* It is fully online. Students *must* have Internet access and an up-to-date computer.

Instructor	Office	Office Hours	Phone	E-mail Address
Erika McCulloch		Monday/Wednesday 11:30 – 12:30 & by online or phone appt.	760-917-2421	emccullo@csusm.edu

Course Text: Shelly, G. B., Cashman, T. J., Andrews, J., & Jedlicka, L. S. (2004). *Understanding and Troubleshooting Your PC.* Boston: Thompson Learning, Inc.

Mission of the College of Education

The mission of the College of Education Community is to collaboratively transform public education by preparing thoughtful educators and advancing professional practices. We are committed to diversity, educational equity, and social justice, exemplified through reflective teaching, life-long learning, innovative research, and ongoing service. Our practices demonstrate a commitment to student-centered education, diversity, collaboration, professionalism, and shared governance.

(adopted by COE Governance Community October, 1997)

Course Description

This online course prepares educators to use computer and software resources and settings to support student needs. The assignments will include a close look at universal access issues and tools, and important copyright law.

Computer Concepts and Applications Supplementary Authorization

This course is one the four courses that have been approved to satisfy the California Supplementary Authorization (CSA) in Computer Concepts and Applications requirement. All four courses are offered completely online! Regardless of where you live in the state, you may now fulfill CSA requirements by completing four 3-unit graduate-level courses in Computer Concepts and Applications.

Course Objectives and Student Outcomes

You will find the objectives and outcomes of this course are embedded in each module. These are thoroughly described at the end of this syllabus.

Assessments

In order to successfully complete this course, assignments must be completed with at least an acceptable level noted on assignment rubrics. In addition to the assignments described in WebCT, performance assessment will be on student's ability to perform tasks using a variety of software. California State University San Marcos has adopted an all-university writing requirement. In each course, students are required to write at least 2500 words in essays, exercises, papers and examinations. Completion of the assignments in this course according to given directions will enable you to exceed that requirement,

Accommodations and Policies

Students with Disabilities Requiring Reasonable Accommodations

Students are approved for services through the Disabled Student Services Office (DSS). This office is located in Craven Hall 5205, and can be contacted by phone at (760) 750-4905, or TTY (760) 750-4909. Students authorized by DSS to receive reasonable accommodations should meet with their instructor during office hours or, in order to ensure confidentiality, in a more private setting.

College of Education Attendance Policy

Due to the interactive nature of courses in the COE, and the value placed on the contributions of every student, students are expected to prepare for, attend, and participate in all classes. For extenuating circumstances contact the instructors before class is missed, and make arrangements to make up what was missed. At minimum, a student must attend more than 80% of class time, or s/he may not receive a passing grade for the course. If a student misses two class sessions or is late (or leaves early) for more than three sessions, the highest possible grade earned will be a "C". Notification of absences does not allow students to assume they are automatically excused from class or making up missed class.

In this course, the instructor has adopted this policy: You must be active in online coursework including email, discussions and activities *at least twice weekly*, or you cannot receive a grade of A or A-. If you are inactive for one week or more, you cannot receive a grade of B+ or B. If you have extenuating circumstances, you should contact the instructor as soon as possible.

Academic Honesty

Please be sure to read and understand the university policy on plagiarism and cheating, as it will be strictly enforced. Academic dishonestly will not be tolerated and will result in a failing grade for this course and will be reported to the University.

From the CSUSM Catalog: "Students will be expected to adhere to standards of academic honesty and integrity, as outlined in the Student Academic Honesty Policy. All written work and

oral assignments must be original work. All ideas/materials that are borrowed from other sources must have appropriate references to the original sources. Any quoted material should give credit to the source and be punctuated with quotation marks. Students are responsible for honest completion of their work including examinations. There will be no tolerance for infractions. If you believe there has been an infraction by someone in the class, please bring it to the instructor's attention. The instructor reserves the right to discipline any student for academic dishonesty in accordance with the general rules and regulations of the university. Disciplinary action may include [but is not limited to] the lowering of grades and/or the assignment of a failing grade for an exam, assignment, or the class as a whole."

Posting Replies (The Value-Added Model)

When replying to a posting in the discussion area by another student, instructor, or a guest, your reply should include the previous message below your comment. You can do this by clicking the **quote** button (*instead of* ***reply***) to begin the post.
Your response must do one of the following:

1. **give an example** of what the prior post had described;
2. **provide a different perspective** of the topic posted; OR
3. **expand upon the idea** posted in the message by including more detail and depth.

Participation and Professionalism

It is expected that all students will have an active presence in the online community. Organize your week so that you **visit the WebCT shell every 2-3 days.** This will provide you the opportunity to stay in touch with the module assignments and discussions. You will need to use an up-to-date computer and operating system that has the ability and speed to use WebCT, play sound files, and view movie clips. It is your responsibility to ***check these capabilities out ahead of time*** and have a plan to identify and utilize a facility or location where you can access using these technical capabilities during the course. Note that all assignment documents must be completed in Microsoft Office (Word and/or Excel). There is a tune up tool on WebCT to test your browser and access. Please use that tool!

Assignment Questions

There is a QUESTIONS section on the Discussion Board. This section is included to allow everyone the benefit of having access to their classmates' and instructor's responses. Please review the posted questions and replies before posting your question(s).

WebCT Questions

Call the CSUSM help desk. Their location and hours are listed on the web: http://www.csusm.edu/iits/sth/. If you leave a message regarding a problem you are having, be sure to leave a phone number and/or email. They can help with all technical aspects of the WebCT environment.

Other Important Considerations

- Assignments are due when noted on the assignment page.
- All assignments should be based on thoughtful reflection and at a Master's level, and submitted only after final editing, having been proofread and word-processed.
- Contact instructor in advance of any absence to weekly module activities and suggest a timeline for how you will make up missed work.

- Grading of written assignments will be based on adherence to the assignment, evidence of revision, clarity, coherence, and legibility in edited text. Points are deducted for spelling and/or grammar errors.

- Remember to cite completely all information obtained in APA (APA Manual, 5th ed.). References are also required.

Grading Procedures and Assignments: Grading is calculated using the following:

94 - 100 = A	80 - 83 = B-	70 - 73 = C-
90 - 93 = A-	77 - 79 = C+	60 - 69 = D
87 - 89 = B+	74 - 76 = C	below 60 = F
84 - 86 = B		

Additional Web Site Resources:

CSUSM Library: http://library.csusm.edu/
WebCT: http://courses.csusm.edu
TaskStream: http://www.taskstream.com
International Society for Technology in Education: http://www.iste.org
Center for Applied Research in Educational Technology: http://caret.iste.org
Tapped In: http://ti2.sri.com/tappedin/
Video Classroom http://www.needleworkspictures.com/vic/Home.html
Apple Learning Interchange: http://www.ali.apple.com
21st Century Literacies: http://www.kn.pacbell.com/wired/21stcent/
Digital Edge Project: http://www.iste.org/inhouse/nets/cnets/dedge/index.html
National Board for Professional Teaching Standards: http://www.nbpts.org/

Tentative Course Schedule

Module Number	Module Topic(s)
Module 0	Introductions, Expectations, & Course Exploration
Module 1	HW, SW, Maintaining/Troubleshooting, Supporting, & Connecting
Module 2	Printers, Protections, and Preventive Maintenance
Module 3	Application of PC Knowledge in Your Work
Module 4	Web Accessibility

Module 5	Web Accessibility and Usability
Module 6	Alternative Tools and Accessibility
Module 7	Defining, Clarifying, & Applying Copyright Law
Module 8	Applying and Evaluating Copyright and Fair Use
Module 9	Compliance with Copyright and Fair Use Laws; Wrap-Up; Exit; Evaluations

MODULE DESCRIPTIONS, INCLUDING ASSIGNMENTS

Module Zero: Introductions, Explorations, and Course Expectations

Welcome to EDST E635: *Hardware Operations and Function to Support Teaching and Learning*. For my introduction, please click on this Welcome Message link.

In Module Zero, you will also be introduced to other course participants; you will examine what this course is all about; and you will learn how you can be successful in EDST E635.

The theme used in this course will be ***CONSTRUCTION***, and each of the modules will include elements using the following terms: Blueprint, Toolbox, Breaking Ground, Laying the Foundation, **Construction Zone, Inspection, and Reflection. For Module Zero, those elements look like this:**

Blueprint: There are several key components to a blueprint, and in this course, those components are referred to as big ideas, essential questions, student outcomes, and Module objectives.

> **Big Ideas:** EDST E633B will prepare educators to use computer and software resources and settings to support student needs. Students will also become familiar with universal access issues and tools, and important copyright law. Read the syllabus for more *big ideas* about this course.
>
> **Essential Questions**
>
> 1. Who are the course participants?
> 2. What skills will I have when I complete this course?
> 3. In what ways will I be able to support my teaching and my students' learning when I successfully complete this course?
> 4. How is this course structured for my success?
>
> **Module Objectives**
>
> - To become a community of learners in EDST E635
> - To learn about each others' skills, work, and goals
>
> **Participant Outcomes**
>
> In this section, you will be given a list of expected outcomes for this module. For example, upon completion of Module Zero, the participants will have:
>
> - met the course instructor;
> - introduced themselves to their classmates;
> - examined the course syllabus & requirements
> - become familiar with the course layout and thematic terminology of the course;
> - completed the course "icebreaker";
> - completed the CTAP self assessment;
> - taken the "Netiquette" Quiz

Toolbox: The tools in your toolbox for each module may vary somewhat. Overall, the tools for this course are the text, web sites, and other resources you will need to complete EDST E635. They include (but are not limited to):

Breaking Ground: In this part of the Module, you will be asked to complete some activities, much the same as you might in a face-to-face class meeting. For Module Zero, please submit to me through WebCT mail 2 or 3 objectives you have set for yourself for this course!

Laying the Foundation: Generally, this section will include reference that will assist you in learning about the content of this course. You will be assigned readings, which will include mini lectures, web sites to examine, and chapters from your course text.

For Module Zero, to lay the foundation, I need some baseline information about your technology skills, including your "Net Etiquette" knowledge. Please complete the following and submit the results to me through WebCT mail: (1) the CTAP self assessment, and (2) the "Netiquette" Quiz.

Construction Zone: In the Construction Zone, you will complete an assignment such as one you might do outside of a face-to-face class. It will be more comprehensive than the activity you did in "Breaking New Ground," and consequently, it is assigned a higher point value.

For Module Zero, please do the following, and post your result as an attachment to a brief "Hello" message on the Discussion Board. Save all work in a folder on your computer hard drive and/or your flash drive.

Follow the given directions and complete the course Icebreaker Worksheet: Star Qualities Directions and Star Qualities Worksheet

Inspection: In this portion of each module, you will engage in a reflective activity. There are 4 rubrics for each Module, and your instructor will apply them to the following elements: *Breaking Ground, Laying the Foundation, Construction Zone, and Inspection.* Each Module is worth 10 points. The point distribution is as follows:

"Breaking Ground"

	No Response	Minimum Response	Adequate Response	Stellar Response
Points:	0	0.5	0.75	1.0

"Laying the Foundation"

	No Response	Adequate Response	Stellar Response
Points:	0	1.0	2.0

"Construction Zone"

	No Response; Late > 3 days	Adequate Response; Late < 3 days	Adequate Response; On Time	Stellar Response; On time
Points:	0	2.0	4.0	6.0

Inspection (Reflection & Self-Assessment)

	No Response; Late > 3 Days	Incomplete Response or < 3 Days Late	Complete Response On Time
Points:	0	0.5	1.0

Module 1: HW, SW, Maintaining/Troubleshooting, Supporting, and Connecting

During Module 1 of EDST E635: *Hardware Operations and Function to Support Teaching and Learning,* you will be using your textbook, *Understanding and Troubleshooting Your PC,* to learn about the hardware and software of your PC, how to maintain and troubleshoot problems that occur, support peripherals, connect to Networks, and more.

Blueprint

Big Ideas:

Having a clear understanding of the hardware and software components, operating systems, Motherboard, memory, and disk drives for personal computers (PCs) increases comfort levels and skills for computer users.

Knowing how to use troubleshooting procedures effectively helps computer users prevent, resolve, and maintain their PCs.

Essential Questions:

1. What is "under the hood" of a personal computer?
2. How do hardware and software communicate?
3. How can I troubleshoot the Motherboard, hard drives, memory, and upgrades to improve a system's performance?
4. How can PC users install, support, and connect input, output, and multimedia devices?

Module Objectives

- To identify internal and external PC components
- To articulate how hardware and software work together
- To use troubleshooting basics to solve computer problems

Expected Outcomes: Upon completion of Module 1, the participants will:

1. Identify internal and external components of a typical personal computer. (Bloom: Comprehension & Application)
2. Explain how hardware and software work together. (Bloom: Comprehension & Analysis)
3. Solve computer problems by using troubleshooting basics. (Bloom: Knowledge & Application)
4. Diagram the input, output, and multimedia ports, wireless connections, and expansion slots of the PC being used for this course. (Bloom: Analysis)

Toolbox: Chapters 1-5 of: Shelly, G. B., Cashman, T. J., Andrews, J., & Jedlicka, L. S. (2004). *Understanding and Troubleshooting Your PC.* Boston: Thompson Learning, Inc.

Breaking Ground: Considering the depth to which this text will go in providing you with detailed information about the given chapter topics, to "Break Ground" for Module 1, read each of the first 5 Chapter Summaries (pp. 30, 69, 118, 153, and 212). This overview of Chapters 1-5 will serve as a review for the concepts presented in each chapter. Compose one question for each chapter for which you would like to discover the answer. Find the answer and include it with your question in your response to Breaking Ground 1.

Laying the Foundation

1. View Mike Irick's demonstration of the internal and external components of a PC, including the motherboard, disk drives, memory, and input/output devices.
2. Using the diagram on page 35 of your text, or one that better represents your own PC (your choice), label as many of the motherboard components as possible.
3. Scan your labeled diagram, and attach a copy to your response to Laying the Foundation 1.

Construction Zone: Scenario - You are the Assistant Manager at a local computer store. You have been asked by your Manager to train several new Customer Service employees. You know from experience that the three most commonly asked questions from customers are:

1. How do my PC's hardware and software communicate?
2. What can I do to troubleshoot the Motherboard, hard drives, memory, and upgrades to improve my system's performance?
3. How can I install, support, and connect input, output, and multimedia devices for my PC?

You also know that your customers need to hear responses that are in laymen's terms. Their general population's comprehension of technical jargon is quite low. Your goal is to have very satisfied customers who will return often and cast their votes for you to be named "Assistant Manager of the Year!"

Your task: Choose two of the three questions above. Write a one-page response to each of the two chosen questions that your Customer Service employees could use as a "cheat sheet" when asked these questions by your store's customers. Use clear and concise "laymen's" terms, bullets, and numbered steps, where appropriate.

Good luck! Your raise depends on it!

Inspection: Surely, you have just added considerably to your knowledge, comprehension, application, and analysis skills about PCs. No doubt you are overwhelmed by how much there is to know and learn.

For Inspection: Reflection and Self-Assessment 1, create a "Letterman's Top 10 Things List" called:

"What I Learned About PCs in Ch. 1-5 (that I didn't already know)!"

Module 2: Printers, Protections, and Preventive Maintenance

During this week of EDST E635: Hardware Operations and Function to Support Teaching and Learning, use your textbook, Understanding and Troubleshooting Your PC, to learn about the variety of printers and how to install them locally and share them on a network. You will also learn how to maintain and troubleshoot problems with your printer, and how to connect with networks and the Internet. Finally, upon completion of this module, you will be introduced to guidelines for maintaining and troubleshooting your PC, including preventive maintenance plans, scheduling backups, and protection from malicious logic programs.

Blueprint

Big Ideas:

Knowledge regarding installing, connecting, maintaining, and troubleshooting problems with printers provides you with desirable professional, technological skill mastery and independence.

Knowing how to use troubleshooting and maintenance procedures effectively helps computer users prevent, resolve, and maintain their PCs.

Essential Questions:

1. What are five (5) features that describe printers, and what function does each feature have?
2. What are the differences among the types of printers, and how are they installed and maintained?
3. What dos one need to know to connect a PC to networks and the Internet?
4. What routine PC maintenance tasks are important to know?
5. What are common malicious logic programs, and how can I protect a PC from them?
6. What are the fundamental rules for troubleshooting a PC?

Module Objectives:

- To identify personal printer features and types
- To describe and solve malicious logic program problems

Expected Outcomes:

Upon completion of Module 2, the participants will:

1. Identify types and key features of a personal printer. (Bloom: Knowledge & Comprehension)
2. Examine assigned chapters for essential information about printers, networks, maintenance, and troubleshooting PCs. (Bloom: Comprehension & Analysis)
3. Solve a malicious logic program problem. (Bloom: Knowledge, Synthesis, Application, & Evaluation)
4. Determine maintenance and troubleshooting needs. (Bloom: Analysis & Evaluation)
5. Describe five (5) types of computer viruses and explain how each of them infects a computer (Bloom: Knowledge, Comprehension, Application, & Analysis)

Toolbox: Chapters 7, 10, & 12 of: Shelly, G. B., Cashman, T. J., Andrews, J., & Jedlicka, L. S. (2004). *Understanding and Troubleshooting Your PC;* your **printer** and your **PC.**

Breaking Ground: To *break ground* for Module 2, read each of the Chapter Summaries for chapters 7, 10, and 12 (p. 300, 456, & 534). This overview will serve as a review for the concepts presented in each chapter. Compose one question for each chapter that you determine would be essential learning to consider for inclusion on an EDST E633B scavenger hunt (to be held in another module). Find the answers to the three (3) questions and include them in your response to Breaking Ground 2.

Laying the Foundation: Exam your personal printer (either at home or in school). Write a "For Sale" add to post at the local computer store that describes the type and features of your printer. Also give the age of your printer, and set an asking price – You never know who might be looking for a printer! (I'll assume it's actually NFS, unless you tell me otherwise!)

Construction Zone: Scenario - Oh, no! Your instructor has a serious problem. Whenever she turns on her laptop, which is a PC, and wants to read her e-mail, an annoying pop-up appears, and there doesn't seem to be a mechanism for getting rid of it! It tells her she has signed up for a movie program service, which she has not (although she did lend her laptop to a college student recently, and thinks the student may have initiated this pop-up problem). What should she do?

Construct a plan for your instructor that includes steps/directions to follow to rid the laptop of this potentially malicious logic program. Include a letter to her that provides her with maintenance and troubleshooting advice to ensure the likelihood that this problem will not occur again.

(p.s. If the situation is hopeless, let her know, and recommend a new PC! Which one, and why?)

Inspection: Time to fess up! Have you been following the advice provided in your text?

1. Make a "To-Do" list for yourself that includes several maintenance and troubleshooting ideas that you have not yet followed. Include a statement for each that describes why you should to it!

2. Make a second list that includes at least five (5) main types of viruses and explain how each of them infects a computer.

Module 3: Application of PC Knowledge in your Work

Congratulations! You have reached the end of the Hardware and PC Functions portion of this course. You have learned and applied skills that reflect your ability to understand and troubleshoot your PC. You have further developed educational leadership skills in technology.

Blueprint

Big Idea: Your commitment to a professional action plan and your technology skills will reap benefits beyond yourself.

Essential Question: How will you use your technology skills in your work?

Module Objective: To reflect on and identify one's own technology levels of expertise

Expected Outcomes: Upon completion of Module 3, the participants will:

1. Identify personal areas of expertise in technology. (Bloom: Knowledge & Evaluation)
2. Design an action plan that incorporates your new learnings and plans for future use of them. (Bloom: Synthesis & Application)
3. Develop a scavenger hunt of PC information that your students (or students in a course like this) need to know to be deemed "knowledgeable" about PCs used for educational purposes.

Toolbox: Toolbox components from Modules 0 through 3

Breaking Ground: Given your text, *Understanding and Troubleshooting your PC*, build on your previous "scavenger hunt" work, and develop a 20-question scavenger hunt list of essential understandings/items that your students (or students in a course like this) need to know to be deemed "knowledgeable" about PCs used for educational purposes.

This exercise is in two parts: (1) The Questions, and (2) The Answers.

Laying the Foundation: Make a personal list of a minimum of 6 facts or skills you have learned in this course thus far.

Construction Zone: "This commitment is brought to you by _____ (fill in your name here!)"

For this construction zone activity, you will design a table that will reflect what you know and what you will do with this knowledge. To build your table, follow these directions:

1. Create a 2-column table with approximately 12 rows.
2. Label the column headings: "Now That I Know…" and "I Will..."
3. List under the heading of Column #1 what you have learned about a PC in this course (according to what you listed in Laying the Foundation 3).
4. You may accompany each item with an icon that does not infringe copyright law. If you do, be sure to include an ALT tag for accessibility purposes. (Optional task)
5. Under the heading of Column #2, make at least one statement that completes the prompt, "I Will…" (Feel free to make more than one statement to accompany each Column #1 item.)
6. Submit the table.

Inspection: Post a brief reflection (2-3 paragraphs) that refers to the first part of the course and how you have benefited from the course content thus far. (Optional: Include in a separate paragraph any constructive comments you would like to make that would contribute to improvements in future iterations of this course!)

Module 4: Web Accessibility

In this module, you will examine issues regarding accessibility to the World Wide Web, including an initiative intended to assist persons with disabilities who use this electronic medium.

Blueprint

Big Ideas

Web accessibility means that people with disabilities can use the Web.

Disabilities can affect Web accessibility.

Web accessibility is important because it helps make the Web available to everyone.

The Web Accessibility Initiative (WAI) develops strategies, guidelines, and resources to help people with disabilities engage productively in Web activities.

Essential Questions

1. What is Web accessibility?
2. Why is Web accessibility important in teaching and learning?
3. How can teachers ensure access for all of their students?

Module Objectives

- To state why they believe *Web Accessibility* is important.
- To create a form to assess *Web Accessibility* of a given/chosen Web site.
- To write a letter of concern regarding the *Web Accessibility of* someone's Web site.
- To develop an understanding of why *Web Accessibility* is important for all.

Expected Outcomes

1. Response to a Discussion Board Prompt for Module One.
2. Creation and application of a Web accessibility assessment instrument.
3. Submission of assessment instrument defense statements.
4. Submission of a Letter of Concern with a hyperlink.
5. A one-paragraph reflection.

Toolbox: With the essential questions in mind, thoroughly examine the following web sites. View the five (5) video clips at the site called, "*Web Accessibility: Access for All.*"

Introduction to Web Accessibility

Web Accessibility Initiative

Evaluating Accessibility

The Cal State San Marcos Web Accessibility Site

"Web Accessibility: Access for All"

Breaking Ground:

Discussion Board Prompt: Post a response to the following prompt on the Discussion Board in the Module One forum: *Why is it important for all of your students to have access to the Web?*

Laying the Foundation: Create a form to assess accessibility of an educational Web site and then apply it to a Web site of your choosing. Include a minimum of five (5) attributes to assess (i.e., use of underlining). In one sentence for each, defend your choice of attributes.

Submit to the instructor in WebCT Mail the blank form, the completed form applied to a chosen Web site, and your defense statements (minimum of 5).

Construction Zone: After reading Evaluating Accessibility, write a professional letter of concern to an organization whose public site does not comply with some of the attributes you included on an evaluation form. In your letter, identify the weaknesses of the site, and offer constructive ideas as to how the site could be amended to comply with the Web Access Initiative.

Submit a copy of the letter to the Discussion Board, **with a hyperlink** to the site you are referring to in your letter.

Inspection Reflection & Self-Assessment: Take a look again at the Essential Questions and Objectives of Module 4. How have you fared in terms of being able to respond with confidence to these questions?

Write and post in WebCT Mail a one-paragraph reflection about your performance in Module 4.

Module 5: Accessibility and Usability

Welcome to Module 5 of EDST E635: *Hardware Operations and Function to Support Teaching and Learning*. In this Module, you will continue to learn about Web *accessibility* and *usability*; you will become familiar with the government guidelines for Web accessibility and *usability*; and you will learn skills for designing an accessible and usable Web site.

Blueprint

Big Idea:

Web sites used for educational purposes should conform to the federal guidelines for Accessibility and Usability.

Essential Questions:

1. *How does a Web designer ensure web accessibility?*
2. What are the government's guidelines for usability?
3. Who is "Bobby," and how can "he" help me to design an accessible Web site?
4. *In what ways do accessibility and usability ensure my students' success?*

Module Objectives:

- To understand how accessibility and usability apply to Web design
- To evaluate a Web site's accessibility and usability
- To create Web sites that are accessible and usable for all students

Expected Outcomes

Upon completion of Module 5, the participants will:

1. demonstrate understanding of **accessibility and usability** as they apply to Web design; (Bloom: Comprehension & Application)
2. distinguish between an accessible and non-accessible web site, according to government guidelines; (Bloom: Analysis & Application)
3. examine/analyze the CSUSM homepage for **accessibility and usability**. (Bloom: Analysis)
4. summarize preliminary steps to take to ensure that students are able to fully access and use the site provided to them. (Bloom: Evaluation)

Toolbox

Accessibility:

- WebXact: http://webxact.watchfire.com/
- "Bobby": http://www.mardiros.net/bobby-report.html

Government Usability Information & Guidelines:

- http://usability.gov/guidelines/
- http://usability.gov/accessibility/508.html
- http://usability.gov/methods/index.html
- http://usability.gov/pubs/news2006.html

- http://www.criterion508.com/about_section_508.html

Other:

- http://www.w3.org/WAI/References/QuickTips/#tips,
- http://www.csusm.edu
- http://usability.gov/methods/collecting_writing.html

Breaking Ground

There is a considerable amount of information about accessibility, usability, and Section 508 on the World Wide Web. For Module 5, after reading the following 10 Quick Tips (http://www.w3.org/WAI/References/QuickTips/#tips), use the WebXact site (http://webxact.watchfire.com/) to examine the accessibility of the Cal State San Marcos homepage (www.csusm.edu). Report in a brief descriptive paragraph how the CSUSM homepage fares according to the 10 tips you learned about.

Laying the Foundation

Before constructing a Web site, there is prior knowledge needed by the Web designer in terms of accessibility and usability. After reading thoroughly the following government Web site (http://usability.gov/accessibility/508.html), and in particular, § 1194.22 Web-based Intranet and Internet information and applications, create two FAQs (Frequently Asked Questions). To do this,

1. Choose 2 from the itemized list
2. pose a probing question related the two items
3. post a corresponding response to each question you pose.

Here's an example:

Re: (g) Row and column headers shall be identified for data tables.

FAQ: In what way might a Web designer present information for data table that would clarify for readers the data presented?

FAQ Response: The Web designer will use (identify) headers for rows and columns to make data tables understandable to the reader.

	Current Students	Previous Students	Non-Students
Student's Names			
Andrews, Julie		X	
Carl, Eric			X
Kirk, James		X	
Pei, Ieoh	X		

Construction Zone: Using the information at the following Web sites, analyze and write a brief report (@ 2 pages) about how Module 5 *does* or *does not* adhere to at least 7 of the 14 topics provided. Present your information in a table with row and column headers.

Site #1: http://usability.gov/guidelines/ (where there are 14 topics to examine)

Site #2: http://usability.gov/methods/collecting_writing.html (where there are 2 topics to examine)

Note: Please include *both* topics from Site #2.

Inspection: In your Self-Reflection for Module 5, reflect on the challenges presented to Web designers to appropriately construct Web sites so that they conform to government requirements of usability and accessibility. Then respond to the following question: *As a teacher (or Web designer), what preliminary steps will I take to ensure that my students (or users of a Web site I construct) are able to fully access and use the site(s) I provide?* (Bloom: Summarize)

Module 6: Alternative Tools and Accessibility

Welcome again to EDST E635: *Hardware Operations and Function to Support Teaching and Learning*. In Module 6, you will use what you have learned about Web *accessibility* and *usability*; you will become familiar with the Microsoft Accessibility Wizard, Zoomtext, Electronic Curb Cuts, Closed Captioning, JAWS, and Dragon Speaking Naturally; and you will share the skills you have for creating accessible and usable Web sites.

Blueprint

Big Ideas:

Web sites used for educational purposes should conform to the federal guidelines for Accessibility and Usability.

Essential Questions:

1. What are alternative tools for supporting students with learning challenges?
2. How do I evaluate my students' technical needs to ensure their success?
3. How can I get support at my school site to enable me to provide accessibility and usability for all of my students?

Module Objectives:

- To examine Web alternatives and tools for persons with disabilities
- To articulate ways to use accessible technology in schools
- To activate a PC's tools to increase its accessibility for a person with a disability

Expected Outcomes

Upon completion of Module 6, the participants will:

1. Demonstrate understanding of alternative Web tools for supporting technology accessibility and usability for students with learning challenges; (Bloom: Comprehension & Application)
2. Discover and describe ways to use accessible technology within the school and the classroom; (Bloom: Knowledge and Synthesis)
3. Examine, practice, and make an adjustment to a computer so that it becomes more accessible to someone with a disability; (Bloom: Knowledge, Application, and Synthesis)

Toolbox

- Balagopal, S. & Young, P. (2005): Increase independence of students with disabilities using Windows and Microsoft Word. Retrieved June 10, 2006, from http://www.microsoft.com/enable/news/education.aspx?v=p
- (2004). Zoo brings curricula to students with disabilities using Tablet PCs. RetrievedJune 10, 2006, from http://members.microsoft.com/CustomerEvidence/Search/EvidenceDetails.aspx?EvidenceID=3385&LanguageID=1Microsoft
- Accessibility Wizard: http://www.microsoft.com/enable/training/windowsxp/usingwizard.aspx
- Zoomtext http://www.synapseadaptive.com/aisquared/zoomtext_9/zoomtext_9_home_page.htm
- Electronic Curb Cuts
- Section 508: http://www.criterion508.com/about_section_508.html

Breaking Ground

Read the Balagopal & Young online article before beginning Module 6. Also check out an example of how technology helps build on student learning: Microsoft (2004). Zoo brings curricula to students with disabilities using Tablet PCs. Now answer these questions:

1. Which version of Windows does your classroom computer have?
2. What are some of the mentioned features that you could use in your classroom if you had students with disabilities?
3. Describe a school situation that would benefit from having technology tools that are currently not available at your school site. (If this does not apply to your site, describe how a tool that is available to you benefits your school.)

Laying the Foundation

There are so many tools that could be added to this module's Toolbox. Clearly, Web accessibility is a hot topic in education and industry. (Disclaimer: We are not endorsing any of the products mentioned in this module, although, from our experience, most have merit. It is your prerogative to further examine and/or purchase these tools.)

- You might be interested in hearing from Bill Gates and people with disabilities in the workplace about accessibility and the efforts Microsoft makes to provide specialized technology hardware and software. If so, click on this link: Bill Gates and Case Studies http://www.microsoft.com/enable/casestudy/videos.aspx
- You also might be interested in previewing several types of assistive technology products. This is merely a sampling of what you might find:
    - Microsoft http://www.microsoft.com/enable/at/types.aspx,
    - Access Ingenuity *http://www.accessingenuity.com/Market%20Place/EducationFocus.htm*, or
    - R. J. Cooper & Associates http://rjcooper.com/index.html

Your task: Following your examination of the following sites…

Accessibility Tutorial: http://www.microsoft.com/enable/training/default.aspx and

Accessibility Guides by Impairment: http://www.microsoft.com/enable/guides/default.aspx

1. …write a brief commentary on the process to set up accessibility provided in the Accessibility Tutorial (i.e., Could it be done independently by parents? By school staff? etc. What are your thoughts?); and

2. describe an adjustment from the Accessibility Guides site that you will practice to make to a computer more accessible.

Construction Zone: It's time to put your talents to good use! In Laying the Foundation you selected an adjustment to make to a computer. Choose something to adjust under your Accessibility Options on your computer. Make your chosen adjustment to a computer now, and either a) fully describe what you did, or b) submit a screen shot of the result! Your results should reflect your application of the Accessibility Tutorial http://www.microsoft.com/enable/training/default.aspx instructions.

Inspection: In your Self-Reflection for Module 6, reflect on a few of the tools you have discovered in this module, and how they might support your students. Also mention what general knowledge and/or skill you have gained by completing this module. *(Bloom: Knowledge, Evaluation)*

Module 7: Defining, Clarifying, and Applying Copyright Law

In this module, you will examine issues of copyright, terms of use, and fair use in electronic environments, including the Internet, e-mail, and beyond. The focus of Module 7 will be on defining and clarifying copyright, what it protects, and who can claim it.

Blueprint

Big Ideas:

Copyright is a form of protection provided by laws of the United States to authors of a wide variety of original published and unpublished works.

Essential Questions:

1. What is copyright, and how does it apply to authored work found in electronic environments?
2. According to the laws of the United States, what forms of authored works are protected by copyright?
3. Am I the author of my work?

Module Objectives:

- To evaluate Copyright laws and their applicability to using electronic technologies
- To develop a PowerPoint that assists colleagues in their understanding of Title 17

Expected Outcomes

Upon completion of Module 7, the participants will:

1. Demonstrate understanding of copyright laws of the United States as they apply to works in print and electronic environments. (Bloom: Comprehension & Application)
2. Examine the U.S. Copyright Law document to discover the wide variety of forms of works that are and are not protected by U.S. copyright laws. Describe a minimum of three (3) chapters within the document that you read, and how they apply to your work as a teacher. (@ one paragraph per chapter) (Bloom: Knowledge and Synthesis)
3. Develop a PowerPoint of a minimum of six (6) slides to present to your colleagues in your workplace. Include relevant details about Title 17 that teachers need to know to do their work within legal confines. Provide on one slide a typical copyright scenario that might need to be particularly emphasized for teachers. Include a permission statement that will allow your

EDST E633B classmates and instructor permission to use all or part of your PowerPoint. (Bloom: Knowledge, Application, and Synthesis)

Toolbox : The following Web sites will be used for Module 7:

- U.S. Copyright Law: Title 17: http://www.copyright.gov/title17/circ92.pdf
- Fair Use: http://www.copyright.gov/fls/fl102.html
- The Cal State San Marcos Web site: http://www.csusm.edu/copyright/
- The TEACH Act and Fair Use: http://www.copyright.iupui.edu/fairuse.htm

Breaking Ground: Post a comment on the Discussion Board "What Do You Want to Know about Copyright" forum that responds to this question: What do you want to know about copyright?

Laying the Foundation: Examine the U.S. Copyright Law document to discover the wide variety of forms of works that are and are not protected by U.S. copyright laws. Describe a minimum of three (3) chapters within the document that you read, and how they apply to your work as a teacher who uses technology. (@ one paragraph per chapter) (Bloom: Knowledge and Synthesis)

Construction Zone: Develop a PowerPoint of a minimum of six (6) slides to present to your colleagues in your workplace. Include relevant details about Title 17 that teachers need to know to do their work within legal confines. Provide on one slide a typical copyright scenario that might need to be particularly emphasized for teachers. Include a permission statement that will allow your EDST E633B classmates and instructor permission to use all or part of your PowerPoint. (Bloom: Knowledge, Application, and Synthesis)

Inspection: Read several of your classmates' questions on the Discussion Board. Respond (with value added commentary) to a minimum of 2 classmates' prompts at the "What Do You Want to Know about Copyright" forum. Begin each response with "I have learned…"

Module 8: Application and Evaluation of Copyright and Fair Use

In this module, you will continue to examine issues of copyright and fair use. The focus of Module 8 will be on applying and evaluating what you have learned to interactive lessons in the following areas: Copyright Basics, Movies and Music, and Fair Use. You will also look how copyright applies to software types and licenses, and Internet and e-mail. Finally, you will examine educators' current practices, and apply what you have learned in an activity designed to assist them in becoming or remaining compliant with the U.S. Copyright Office's policies.

Blueprint

Big Ideas:

Copyright is a form of protection provided by laws of the United States (title 17, U.S. Code) to authors of a wide variety of original published and unpublished works.

Fair Use is the right to reproduce or to authorize others to reproduce the work, and is codified in section 107 of the copyright law.

Essential Questions:

1. How does copyright apply to movies, music, software types and licenses, and Internet and e-mail?

2. What are specific fair use issues for educators?

Module Objective:

To increase knowledge and application of copyright laws and fair use policies as they relate to using the World Wide Web

Expected Outcomes

Upon completion of Module 8, the participants will:

1. Engage in interactive lessons related to the application of copyright and fair use to the Internet and e-mail; as well as software types and licenses (Bloom: Comprehension & Application)
2. Describe how to ensure ownership of a personally authored and illustrated work. (Bloom: Knowledge, Application, and Synthesis)
3. Examine fair use activities, and the implications they have for educators. (Knowledge, Comprehension, Application, Analysis, and Evaluation)

Toolbox

The following Web sites will be used for Module 8:

1. Western Washington University's Copyright Lessons

2. 1961 Report of the Register of Copyrights on the General Revision of the U.S. Copyright Law

Breaking Ground: The Power Points for which permission to use was received will be posted on the Discussion Board under the heading Title 17 Power Points.

Examine a Power Point presentation created by one of your EDST E635 colleagues. Provide value-added feedback to one of your classmates that addresses the usefulness, or utility, of all or part of their posted Power Point in your own work.

Laying the Foundation: Complete the interactive lessons found at the Western Washington University's web site. Describe to the instructor a minimum of three new learnings you discovered as a result of your interaction with this site.

Construction Zone: For this assignment, you will attach two documents to your response.

Scenario: You are an author of a recently completed children's book, and you have done your own illustrations. Some of your colleagues have recommended that you "get your work copyrighted." Others have told you to "register your work."

Of course, you want your work to be secured. You want your colleagues to know how to secure theirs, as well. You want to do the best you can to ensure that. So, what will you do?

1. Using the information you have read, lessons you have completed, and research you have done, make some decisions and submit a written response (2 pages maximum) defending your decision.

2. Write an advisory notice to display in your teacher's lounge that provides teachers with step-by-step directions to follow to secure ownership and all rights to their own creative works.

Inspection: According to the 1961 Report of the Register of Copyrights on the General Revision of the U.S. Copyright Law certain activities are regarded by the courts as fair use. These include:

1. quotation of excerpts in a review or criticism for purposes of illustration or comment;
2. quotation of short passages in a scholarly or technical work, for illustration or clarification of the author's observations;
3. use in a parody of some of the content of the work parodied;
4. summary of an address or article, with brief quotations, in a news report;
5. reproduction by a library of a portion of a work to replace part of a damaged copy;
6. reproduction by a teacher or student of a small part of a work to illustrate a lesson;
7. reproduction of a work in legislative or judicial proceedings or reports; and
8. incidental and fortuitous reproduction, in a newsreel or broadcast, of a work located in the scene of an event being reported.

As you reflect on your own practices and educational activities in which you may or may not have followed fair use laws. Discuss an example of a commonly infringed practice, and how you might assist your colleagues in becoming compliant with legal practices.

Module 9: Compliance with Copyright and Fair Use Laws

During the week of Module 9 of EDST E635: Hardware Operations and Function to Support Teaching and Learning you will evaluate documents for compliance with copyright and fair use laws. You will also examine and develop a terms of use policy to apply to a new virtual institution.

Blueprint

Big Ideas:

Copyright is a form of protection provided by laws of the United States (title 17, U.S. Code) to authors of a wide variety of original published and unpublished works.

Fair Use is the right to reproduce or to authorize others to reproduce the work, and is codified in section 107 of the copyright law.

Terms of Use are rules, or details of restrictions, that are set up to govern how the intellectual property, (information, ideas, or other intangible products of the mind or intellect) or a particular person, group, or organization may be legally used.

Essential Questions:

1. Given several actual models of copyright, fair use, and terms of use policies, what essential elements will you include in your virtual school's policies?
2. Why would a virtual school need copyright, fair use, and terms of use policies?
3. What will the process be for your school to receive approval of the proposed policies?

Module Objectives:

To acquire skills to develop Copyright, Fair Use, and Terms of Use policies

Expected Outcomes

Upon completion of Module 9, the participants will:

1. Research the meanings and applications of copyright, fair use, and terms of use policies used in electronic environments. (Bloom: Knowledge and Comprehension)
2. Examine several actual copyright, fair use, and terms of use policies. (Bloom: Knowledge, Comprehension, and Analysis)
3. Determine the essential elements of well composed copyright, fair use, and terms of use policies. (Bloom: Knowledge, Application, and Synthesis)
4. Further examine, apply, and evaluate fair use activities, and the implications they have for educators. (Knowledge, Comprehension, Application, Analysis, and Evaluation)
5. Use a checklist to determine their readiness to use the TEACH Ac

Toolbox

The following Web sites will be used for Module 9:

1. The Grauer School in Encinitas, CA
2. Los Angeles Unified School District
3. Bill Arnett's Solar System Site
4. National Education Association
5. Georgia Harper's TEACH Act Checklist

Breaking Ground: The Power Points for which permission to use was received will be posted on the Discussion Board under the heading Title 17 Power Points. Examine a Power Point presentation created by one of your EDST E635 colleagues. Provide value-added feedback to one of your classmates that addresses the usefulness, or utility, of all or part of their posted Power Point in your own work.

Laying the Foundation: Read the Copyright, Fair Use, Terms of Use, and TEACH Act information at each of the 5 given Web sites in the Toolbox. (Note: Not every topic is found at every site.) Comment on any patterns that you have noticed in the way each site presents its policies.

Construction Zone: You have just become principal of a virtual elementary school ~ a school that will serve K-5th grade students in remote areas of Alaska. Your school needs to ensure the curriculum and site properties are secure, and visitors who use your site do so in accordance with the federal law.

Construct a detailed Copyright, Fair Use, and Terms of Use page for your school's web site that is comprehensible to local citizens to avoid misunderstanding or non-compliance; as well as sufficiently specific so as to conform to the U. S. laws governing these issues.

The policies may appear as concise paragraphs on the same document. Your document length should be no more than 2 pages.

Extra credit (5 points): Examine Bill Arnett's Solar System site, and let the instructor know whether Steve's site conforms to the standards set by your virtual school.

Inspection: Apply the TEACH Act checklist to your school, and report the positive and negative results.