Task:

Create syllabi and a system of storage that allows the college to meet accreditation standards.

Accreditation Standards:

II.A.3 The institution identifies and regularly assesses learning outcomes for courses, programs, certificates and degrees using established institutional procedures. The institution has officially approved and current course outlines that include student learning outcomes. In every class section students receive a course syllabus that includes learning outcomes from the institution's officially approved course outline.

II.A.5 The institution assures that students and prospective students receive clear and accurate information about educational courses and programs and transfer policies. The institution describes its degrees and certificates in terms of their purpose, content, course requirements, and expected student learning out- comes. In every class section students receive a course syllabus.

http://www.accjc.org/wp-content/uploads/2015/01/Accreditation_Standards_Adopted_June_2014_Annotated_with_Policies_and_Regulations_Dec_18_2014.pdf

Actionable Improvement Plan to Address Deficiencies to Standard:

In order to ensure that every student receives clear and accurate information with specific learning outcomes, consistent with the College's officially approved course outline of records, the College will implement a system for reviewing and storing accurate syllabi for every class.

Note: The committee recommends that "review" only represent research to support assertions needed for required reports and/or accreditations. It is not to be construed as relate to examining individual faculty syllabi outside of the normal evaluation process as defined in the COCFA contract.

Purpose of the syllabus:

The syllabus forms the backbone of a course offering. Ideally the syllabus is a description and plan for a course and should facilitate student learning.

The syllabus functions as a major communication device that provides details of how student learning will be assessed and about the roles of both student and instructors in the learning and assessment process.

Habanek DV. An examination of the integrity of the syllabus. Col Teach. 2005;53:62–4.

The course outline of record is the official contract for student learning. Therefore, the syllabus should accurately reflect the outcomes, objectives, content, and assignments found in the course outline of record.

http://provost.hamptonu.edu/cte/legally_sound_syllabi.cfm

http://www.thismess.net/2014/03/syllabus-as-contract.html

Recommendations:

The Syllabus Committee has the following recommendations for College of the Canyons course syllabi:

1. Establish the practice of storing syllabi in a manner that makes them easily accessible by individuals collecting data for required reports.
2. Adopt a list of required elements for all syllabi.
3. Establish a neutral to warm tone early in the syllabus outline to engage students fully in the information presented.
4. Eliminate bias in the syllabus, such as indicating that grades may be influenced based on attendance or participation in discussions.
5. Establish a format for syllabi based on common elements found nationally to facilitate data collection for required reports and/or any reviews initiated by chairs and coordinators.
6. Publish a sample format for an addendum of services.

APPENDIX OF RESCOURCES

Elements

Organization

Tone

Student Resources

Cell Phone Use

SYLLABUS ELEMENTS

The following chart indicates common elements found in syllabi nation wide and suggests which should be considered required, recommended, or optional. The suggestions are based on two surveys conducted by Institutional Research: 1) Faculty survey, spring 2016 https://intranet.canyons.edu/offices/instdev/ResearchBriefs/SyllabusSurveySpring2016_119_09_16.pdf, and 2) Student survey, fall 2016 (sent separately).

Required for Accreditation

Item		Guidelines
College Name		*Assists student when they must supply a syllabus to a transfer school. Meets accreditation standard.*
Official Course Title		*From CurricUNET http://www.curricunet.com/canyons/* *Correctly identifies course; necessary for accreditation standard.*
Course prefix and number		*From CurricUNET http://www.curricunet.com/canyons/* *Correctly identifies course; necessary for accreditation standard.*
Term		*List the term the course is taught. Helps identify course; necessary for accreditation standard.*
Section number(s)		*From schedule of classes. Correctly identifies course; necessary for accreditation standard.*
SLO(s)		*From CurricUNET http://www.curricunet.com/canyons/* *Required for accreditation*

Institutional Requirements

Item	Guidelines
Course description	*Use the official description from the course outline of record (COR) in CurricUNET http://www.curricunet.com/canyons/*
Units	*Important information for students.*
Add/drop deadlines	*Informs students of important deadlines. Refer to roster available via My Canyons for individual deadlines https://my2.canyons.edu/WebAdvisor/WebAdvisor?TYPE=M&PID=CORE-WBMAIN&TOKENIDX=1988861395*
Schedule and location of class meetings	*Necessary information for students.*
Course objectives	*From CurricUNET http://www.curricunet.com/canyons/* *Title 5 indicates that the grade assignment must be based on how well the student achieved the objectives of the course.*
Required materials	*Necessary information for students. May be purchased or OER materials*
Content outline	*From CurricUNET http://www.curricunet.com/canyons/*
Course calendar	*List dates of class meetings and relevant homework/assignments.*
Graded assignments and learning activities	*List the assignments and any activities for which students receive a grade. Title 5 requires that grades be directly related to the learning objectives.*
Grading matrix	*Explain the value of each graded assignment in relation to the final grade.*

Grade scale to determine final grade	*Define the point breakdown for each possible grade. For example A = 90-100*
Instructor(s) name	*Provide the names of all instructors teaching the course.*
Instructor(s) contact information	*Telephone & email; indicate the usual speed with which calls or emails will be answered and the preferred method of contact. If students must use a college email address, be clear about this requirement.*
Office hours and location	*List days, room, and hours you are available for office hours. Required by contract.*
Late policy for assignments	*List policy for accepting and grading work that is turned in after the due date.*
Missed exams	*List policy for making up exams or quizzes*
Submission information	*Directions for submitting graded work, including formatting.*
Absence/tardy policy	*Explain allowable absences and tardy policy. Refer to Board of Trustees Board Policy BP 4233 on the BOT website http://www.canyons.edu/offices/bot/Pages/default.aspx*
Academic integrity	*COC Academic Integrity Statement is available on the Academic Senate website http://www.canyons.edu/Offices/AcademicSenate/Pages/Documents.aspx*
Schedule change policy	*Communicate the prerogative of the instructor to change the course schedule and assignments at his/her discretion.*

Recommended

Item	Guidelines
Prerequisites	*List required prerequisites and/or recommended preparation.*
Departmental grading policies	*Some departments have special policies for passing grades. Students need to be aware of these policies.*
Revision policy	*Explanation of the revision process if a course allows or requires graded work to be revised and resubmitted*
Classroom courtesy, cell phone policy	*List classroom rules. Instructors individually define cell phone/electronic device policy. Policy should be one that the instructor is comfortable enforcing consistently.*

Optional

Item	Guidelines
Instructor biography	*Instructor background.*
Teaching philosophy	*Instructor approach to teaching.*
Methods of instruction	*Manner in which the course will be taught.*
Placement of course within program sequence of courses	*Explain where in the program the course is placed, i.e. capstone course.*

Supplemental Information Posted Electronically

Item	Guidelines
Management of stress and mental health issues	*Insert statement from Student Health and Wellness Center. Contact information: http://www.canyons.edu/offices/health/Pages/default.aspx, telephone:* 661-362-3259
Emergency procedures	*List emergency number for campus and evacuation route.*
Addendum of college services	*It may be helpful to students to create a separate addendum to the syllabus that contains a list of student services such as the TLC, Library, Student Health and Wellness Center, DSPS.*

ORGANIZATION OF SYLLABUS

Introduction

Item	Explanation
College Name	*Assists students when they must supply a syllabus to a transfer school*
Official Course Title	*From catalog or schedule of classes*
Course prefix and number	*From catalog or schedule of classes*
Term	*List the term the course is offered.*
Section number(s)	*From schedule of classes*
Course Description	*Use official description from course outline of record (COR) in CurricUNET http://www.curricunet.com/canyons/*
Units for course	*Refer to catalog or course outline of record*
Prerequisites	*List required prerequisites and/or recommended preparation.*
Schedule and location	*Days of the week the course meets, room, and hours*
Add/drop deadlines	*Informs students of important deadlines*

Instructor Information

Item	Explanation
Instructor(s) name	*Provide the names of all instructors teaching the course*
Biography	*Instructor background*
Teaching philosophy	*Instructor approach to teaching*
Contact information	*Telephone & email; indicate the usual speed with which calls or email will be answered and the preferred method of contact. If students must use college email address for emails, be clear about this requirement.*
Office hours and location	*List days, room, and hours you are available for office hours. Required by contract.*

Student Learning Information

Item	Explanation
SLO(s)	*Copy the student learning outcomes from the COR.*
Course objectives	*Copy the course objectives from the COR.*
Required materials	*Books, calculators, or any other materials needed to be successful in the course.*
Content	*List of key topics covered in course – must match those listed in COR.*
Methods of instruction	*Manner in which the course will be taught.*
Course calendar	*List of dates of course and relevant homework/assignments.*

Assignments, Assessments, and Evaluations

Item	Explanation
Key graded assignments, projects, and exams with weighted total toward final grade	*List the assignments and any activities for which students will receive a grade. Explain the value of each graded assignment in relation to the final grade.*
Grade scale to determine final grade	*Define the point breakdown for each possible grade. For example A = 90-100.*
Submission information	*Directions for submitting graded work, including formatting.*
Late policy	*Policy for accepting and grading work that is turned in after the due date.*
Revision policy	*If the course allows or requires graded work to be revised and turned resubmitted, that process should be explained.*
Exams policy	*Policy for making up exams or quizzes.*
Departmental grading policies	*Some departments have special policies on the passing grade. For example the Nursing Department specifies that 75% is the passing grade in nursing courses.*

Course Policies

Item	Explanation
Absence/tardy policy	*Explain allowable absences and tardy policy. Refer to Board Of Trustees policy #4233 at the BOT website.*

Academic integrity	*COC Academic Integrity Statement is available on the Academic Senate Website.*
Classroom courtesy, cell phones.	*List classroom rules related to courtesy.*
Emergency Procedures	*List emergency number for campus and evacuation route.*
Management of stress and mental health.	*Statement from Health Center and contact number.*
Statement informing students that the course schedule and/or assignments may be changed at the instructor's discretion	*Communicate the prerogative of the faculty member to change the course schedule and assignments at his or her discretion.*
Addendum of services	*List of student services such as the TLC, Student Health, DSPS…*

Characteristics of a Warm Syllabus

Characteristics

A. Introduction
- Try beginning your syllabus with an introduction which invites students to your class.

For example:

	Cold	Neutral	Warm
Introduction	This is College 101. Please refer below to the rules and my expectations of you in this class.	Welcome to College 101. Please refer below to the rules and my expectations of you in this class. Being familiar with the syllabus will help you succeed in this class.	Hello and welcome to College 101. I'm looking forward to our time together this semester. I hope your experience in this class will be a positive one and that you will succeed in this class.

B. *Self-Disclosure*
- One way a syllabus can facilitate a warm and inviting classroom environment is through the sharing of personal experiences.
- What do you want your students to know about you? Your background? Your interests inside and outside of your discipline?

C. *Positive or Friendly Language*
- Use positive, friendly language so students feel comfortable and welcome. Positive or friendly language should be used throughout the syllabus.

For example:

|	Cold	Neutral	Warm
Office Hours	Office Hours: MW 8:30 – 9:30am ateacher@canyons.edu Office: BLD 123	Office Hours: MW 8:30 – 9:30am ateacher@canyons.edu My office is in BLD 123. If you need to contact me, you may email me or call my office line and leave a message. I will return your email or call when I am able to.	Office Hours: MW 8:30 – 9:30am ateacher@canyons.edu Individual assistance is always available by appointment. I look forward to seeing you during student hours. Stop in, my office is in BLD 123. You're welcome to come by to chat, work on HW, or ask questions.

D. *Compassion*

- Compassion can be shown in the attendance policy, when acknowledging unexpected life events.
- Instructors should strongly encourage students to attend class while also acknowledging that unforeseen events may occasionally prevent perfect attendance. In such cases, where the student is experiencing illnesses, death in the family or other traumatic events, a supportive word may be needed.
- Providing a limit on the number of missed classes is acceptable, with the syllabus noting that when students surpass the allotted excused absences, they are overextended and it may not be the best semester in which to take the course.

Some examples:

	Cold	Neutral	Warm
Attendance Policy	I will keep attendance records. The current school policy is to drop students who have missed more than 10% of the course.	I will keep attendance records. Any student failing to attend class for ____ days, without an approved excuse from their instructor, may be dropped from the course.	You should attend every class. I understand that sometimes circumstances arise that can make this difficult, but please let me know before class if you cannot attend. If you are unable to attend this class with less than ___ classes missed, you may have overextended yourself and you should consider dropping the class.
Learning Resources	If you need help with this course, please refer to following website that will give you a list of resources on campus:	If you need help with the course, please see me during office hours. If you cannot make office hours, please contact me to set up an appointment. There is also the following resources on campus:	We've all needed help in something at some point in our lives. If you find yourself not understanding the assigned readings, lectures and assignments, please set up an appointment with me. You might also find the following resources on campus helpful:

E. *Humor*
- Humor or not taking oneself so seriously can help with tone, but humor can be tricky and requires tact.
- Try finding a cartoon, joke or anecdote about the course topic matter.
- Humor shows an instructor's enthusiasm for his/her discipline.
- Humor can also grab a student's attention to important details in the syllabus and increase motivation for learning the course material.
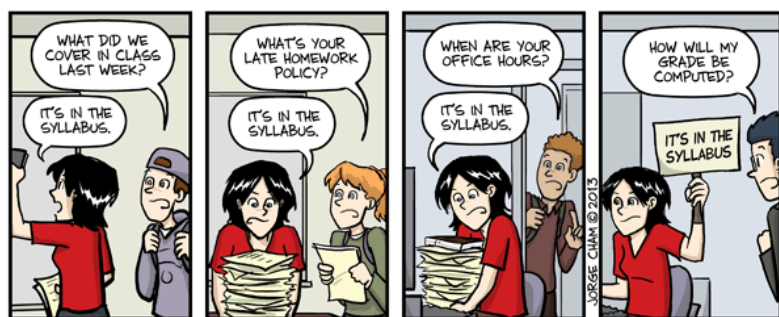
IT'S IN THE SYLLABUS

This message brought to you by every instructor that ever lived.
WWW.PHDCOMICS.COM

F. *Enthusiasm*
- Use the syllabus as an opportunity to show your students your passion for teaching and for your subject matter.
- Enthusiasm has been found to foster active learning and student engagement.

For example:

	Cold	Neutral	Warm
In Class Activities	Your active participation in class activities is expected in this course.	Your active participation in class activities is expected in this course. I expect you to actively participate by helping to summarize key learnings from the lecture and class discussion. Your comments, thoughts, questions and engagement in the in-class demonstrations will count toward your final grade. Please be advised that I may call on students or make comments that are intended to make the lectures a little more lively and interesting.	I hope you actively participate in class activities in this course. I say this because I found it is the best way to engage you in learning the material (and it makes the lectures more fun). I welcome your comments, thoughts, questions, and hope you take an active role in the in-class demonstrations. If the class is too quiet, I may call on a student to share his or her thoughts. Please note that if I do so, I am not "picking" on that student. I'm hoping to make the lecture a little more lively and interesting.

Resource:

Creating the Foundation for a Warm Classroom Climate; Best Practices in Syllabus Tone
By **Richard J. Harnish, Rory O'Brien McElwee, Jeanne M. Slattery, Sue Frantz, Michelle R. Haney, Cecilia M. Shore, Julie Penley**

http://www.psychologicalscience.org/index.php/publications/observer/2011/january-11/creating-the-foundation-for-a-warm-classroom-climate.html

Syllabus Addendum

Classmates	Name:_____ Contact Info:_____
	Name:_____ Contact Info:_____
	Name:_____ Contact Info:_____
TLC *The* *Learning Center*	A <u>student ID card is required</u> to receive tutoring support, use a computer, or complete a workshop/guided learning activity. Student ID cards may be obtained in Quad 1C (Admissions and Records) at Canyon Country or in STCN-102 at Valencia. If you only need to take an exam in the TLC, you may use a photo ID to receive your exam, but you do not need your student ID. Some other notes about taking exams in the TLC: Have your scratch paper stamped by a TLC employee, to not leave the testing room in the middle of the exam unless you are willing to turn in your exam as completed at that time, to leave your backpack/purse and electronic devices with the information desk, and to arrive more than 1 hour before the TLC closes in order to be given your exam. http://www.canyons.edu/offices/TLC/Pages/default.aspx
Library	http://www.canyons.edu/offices/library/Pages/default.aspx
ASG Computer Lounge	Free to students who pay their student support fee. At Canyon Country: CCC-204 At Valencia: Student Center 124 http://www.canyons.edu/Offices/StudentDevelopment/Pages/ASG-Computer-Lab.aspx
Campus Maps	http://www.canyons.edu/Offices/PIO/Pages/CampusMaps.aspx
Transportation	Bus #5 stops at CCC. Bus #4 stops at the Valencia Campus. There are several other buses, local and commuter, that drop off near the Valencia Campus. http://www.santaclaritatransit.com/routes-schedules/
Counseling Department	Please see a counselor to create an Education (Ed) Plan. The Counseling Department provides workshops, classes, consultations at the drop-in-desk, and answering questions by a program advisor at the counter. At CCC, go to Quad 1A.

http://www.canyons.edu/offices/Counseling/Pages/default.aspx

CTE	CTE stands for Career Technical Education and includes vocational programs. http://www.canyons.edu/offices/CTE/Pages/default.aspx
Career Services	The Career Center provides resume workshops, job fairs, interview preparation, job search strategies, and more. http://www3.canyons.edu/offices/careercenter/
Transfer Center	http://www.canyons.edu/offices/transfercenter/Pages/default.aspx You should also view the webpage http://www.assist.org/ for which classes articulate between COC and other colleges for different majors.
Health Center	The health center provides clinical services, health education, referrals, and assistance in getting health insurance. http://www.canyons.edu/offices/Health/Pages/default.aspx
Financial Aid	At CCC, go to Quad 1A. http://www.canyons.edu/offices/FinancialAid/Pages/default.aspx
Early Childhood Education	The Canyon Country and Valencia campuses have a preschool that operate Monday through Friday if you have young children. http://www.canyons.edu/Departments/ECE/Pages/default.aspx
VLL Virtual Learning Lab	The Virtual Learning Lab provides practical strategies to anyone interested in becoming an expert learner. Eight lessons help students prepare for thoughtful study, acquire essential learning skills, and cultivate determination and persistence. http://www3.canyons.edu/offices/matric/vll
Disabled Students Programs and Services	You may qualify for extra time on exams and other resources if you have any of the following: an identified learning disability or a history of difficulties in school, memory problems, recent stroke or head trauma, hearing impairment, visual impairment, identified psychological disorders, attention deficit disorder (ADD or ADHD), communication disorders, other physical disabilities.

http://www.canyons.edu/offices/dsps/Pages/default.aspx

Extended Opportunity Programs & Service	EOPS is a state funded program, which provides support services to eligible students attending College of the Canyons. The program's aim is to serve and encourage students to continue their education on the community college level. The specific responsibility of EOPS is to develop and provide programs, services, techniques and activities that support students in addition to the support received through traditional college program. http://www.canyons.edu/offices/eops/Pages/default.aspx
MESA *Math, Engineering, Science Achievement*	MESA serves to enrich the experience of students majoring in math, science and engineering at College of the Canyons. MESA supports financially disadvantaged and/or historically underrepresented students by providing a variety of services including academic advisement, discipline specific enrichment and community building opportunities. Their primary goal is to equip MESA students with the skills and attitudes necessary for their successful transfer to university. http://www.canyons.edu/offices/mesa/Pages/default.aspx
Veterans and Adult Reentry	At CCC, go to Quad 1B. http://www.canyons.edu/offices/VA/Pages/default.aspx http://www.canyons.edu/offices/AdultReentry/Pages/default.aspx
Internship Opportunities	Did you know that students with internship experience earn more money and find jobs faster than classmates without internship experience? http://www.canyons.edu/offices/cwee/Pages/default.aspx
Program Course Sequence (MATH example)	Since the math placement chart does not show the calculus path, I wrote a few notes below. When it comes to the calculus path, follow the sequence: Math 211 – 212 – 213 Calculus I, II, and III (same book) Math 214 Linear Algebra (may take after 212, but I recommend after 213) Math 215 Differential Equations (take after 213 or concurrently with 213)
Associate Degree Options (MATH example)	**AS degree in Mathematics** Math 211, 212, 213, and one from: Math 140, 214, 215, Physics 220, or CompSci 111 **AS-Transfer degree in Mathematics** (Intended for students who will transfer as a math major to CSUN or possibly Cal State Channel Islands. Please see a counselor for more details.) Math 211, 212, 213; one from Math 214, 215; one from

Math 140/H, 214, 215, CompSci 235, 236, 111&111L

Research on Cell Phones & Devices in the Classroom

Table of Contents

Section I: Overview

Section II: Highlights from the Research

I. Overview:

1. **Purpose:** The purpose of this document is to provide an overview of landmark research on the impact of cell phones, laptops, and other devises in the classroom. As these devices are becoming more common and as there are many different viewpoints on best practices, the following research was compiled to help faculty (and possibly students) to make informed decisions about their classroom policies.

2. **Summary:** The research indicates that the best approach overall is for faculty to set a policy about digital devices that they are consistent in enforcing, whether this is developed with the help of the students or not. Second, while many researchers embrace utilizing these devices as educational tools to some extent in the classroom, they still acknowledge that such practices only go so far in curtailing the distracting nature of the devices. Particularly problematic is that students themselves greatly underestimate how much they are distracted by the devices and how poorly they perform when multitasking.

3. **Recommendations:**

   a. **Create policies** that you are willing to fairly consistently enforce (see Zhu on p.3).
      i. A lack of a policy is more problematic than any other avenue.
      ii. Consider creating a device-free zone in class for students easily distracted.
      iii. If devices are used as educational tools, it can be more effective to carefully delineate when devices are allowed in class rather than simply ask students to always have them.
   b. **Educate students** on the impact of devices.
      i. Show them highlights from the research in the following pages, such as the Kraushaar study (p. 3) which demonstrates that students tend to underestimate how much time they spend on devices and the Kuznekoff study (p.5) showing that students using devices more tend to get lower grades and retain much less.
      ii. Show students relevant segments of "Digital Nation: Life on the Virtual Frontier." Recommended is the 3-minute "Study of Multitaskers" segment, which demonstrates how poorly students actually perform when multitasking. (This video is available on the Films on Demand database): http://ezproxy.canyons.edu:2346/p_ViewVideo.aspx?xtid=55996&tScript=0.
   c. **Discuss students' views** on cell phones and other devices in the classroom.
      i. Help facilitate a discussion on pros and cons.
      ii. Help students consider the impact on those around them.
   d. If it fits your teaching style, embrace the use of cell phones and other technologies as a resource in the classroom, but be aware that simply embracing their use doesn't mitigate all potential problems with these devices.

II. Highlights from the Research:

1. Zhu, Erping et al. "Use of Laptops in the Classroom: Research and Best Practices." University of Michigan, Center for Research on Learning and Teaching, 2011.
   http://www.crlt.umich.edu/sites/default/files/resource_files/CRLT_no30.pdf

   Introduction

   Across campus, laptops and other mobile devices, such as iPads and smartphones, are appearing in greater numbers in the classroom. In a CTools survey of 1,415 U-M students conducted in Winter 2010, over 50% of respondents reported bringing their laptops to class at least once per week (USE Lab, Digital Media Commons, 2010). Many faculty see this trend as an opportunity for more innovative teaching, and they are exploring ways to leverage this technology to increase student engagement during lecture. However, other faculty worry about potential distractions that mobile devices could introduce into their classrooms. In this Occasional Paper, we present the results of a CRLT research study that examined student perceptions of how laptops affect attentiveness, engagement, and learning, and we suggest guidelines for using laptops and other mobile devices effectively in the classroom. As we discuss below, laptops can be an effective tool for promoting student learning if faculty plan carefully for how and when they will ask students to use their laptops, rather than simply allowing students to bring them to class.

   Recommended Policies:

   ➢ Set a laptop policy and communicate it to students.
   ➢ Identify a laptop-free zone in class.
   ➢ Determine how well the classroom infrastructure supports active laptop use.

   Recommended Practices:

   ➢ Full integration of laptops into the classroom structure using LectureTools.
   ➢ [Suggested] Other ways laptops can support communicative interactions.
   ➢ Laptops as tools for reflection and idea generation.

2. Doyle, Terry and Todd Zakrajsek. *The New Science of Learning: How to Learn in Harmony with Your Brain*. VA: Stylus, 2013.

   Overview

   Almost daily, neuroscience, biology and cognitive science researchers reveal new insights about how the human brain works and learns. The value of this research is its potential to elevate the learning success of all students regardless of their learning situations. This [text] will discuss many of these new research findings and suggest ways to apply them in a higher education setting. Topics will include preparing the brain to learn, findings on movement and exercise, sleep, memory formation and recall, attention enhancers, multisensory learning and teaching and the role of patterns in teaching and learning.

3. Kraushaar, James M. and David Novak. "Examining the Effects of Student Multitasking with Laptops during the Lecture." *Journal of Information Systems Education* 21.2 (July 2010): 241-51.

Abstract

This paper examines undergraduate student use of laptop computers during a lecture-style class that includes substantial problem-solving activities and graphic-based content. The study includes both a self-reported use component collected from student surveys as well as a monitored use component collected via activity monitoring "spyware" installed on student laptops. We categorize multitasking activities in productive *(course-related) versus* distractive *(non course-related) tasks. Quantifiable measures of software multitasking behavior are introduced to measure the* frequency *of student multitasking, the* duration *of student multitasking, and the* extent *to which students engage in distractive versus productive tasks.*

We find that students engage in substantial multitasking behavior with their laptops and have non course-related software applications open and active about 42% of the time. There is a statistically significant inverse relationship between the ratio of distractive versus productive multitasking behavior during lectures and academic performances. We also observe that students under-state the frequency of email and instant messaging (IM) use in the classroom when self-reporting on their laptop usage.

Conclusion (excerpts)

…The test bed course requires the use of laptops and there are many class periods where software use is a critical component of the primary learning task. The findings of this study might differ for courses that do not require laptop use during the lecture because there may be relatively few productive uses of laptops in those courses. Classes that allow laptop use during the lecture but do not actively require their use to learn the course material are likely to have different multitasking and usage trends. The affects of using laptops in these classes may also be different….

…Another issue that warrants future study is investigating how laptops might be used to maximize learning while at the same time minimizing distraction. Obviously, part of the responsibility for facilitating non-distracting laptop use lies with the educator and part lies with the student. Both students and educators can benefit from better information regarding the potentially negative impacts arising from distractive laptop usage, while educators may need to be more involved with encouraging / discouraging certain types of behaviors in the classroom. Additional studies that address how differences in course structure, content, and evaluation methods might facilitate more positive learning outcomes with respect to laptop usage in the classroom are needed.

It appears that more students are bringing new and sophisticated technologies to lecture with advanced multitasking skills to match. However, students may not fully understand the potential negative aspects created by recreational multitasking use. Perhaps a better approach to banning laptops from the classroom is to encourage additional research into better ways to measure multitasking laptop use in the classroom to identify new empirically tested learning strategies.

4. Kuznekoff, Jeffrey H. and Scott Titsworth. "The Impact of Mobile Phone Usage on Student Learning." *Communication Education* 62.3 (July 2013): 233-52.

Abstract

In this study, we examined the impact of mobile phone usage, during class lecture, on student learning. Participants in three different study groups (control, low-distraction, and high-distraction) watched a video lecture, took notes on that lecture, and took two learning assessments after watching the lecture. Students who were not using their mobile phones wrote down 62% more information in their notes, took more detailed notes, were able to recall more detailed information from the lecture, and scored a full letter grade and a half higher on a multiple choice test than those students who were actively using their mobile phones. Theoretical and pedagogical implications are discussed.

Conclusion

The goal of this study was to further understand and examine the impact of student texting/posting, during class lecture, on student learning. We found that students who were using their mobile phone frequently during a video lecture scored, on average, 13 percentage points, or a letter grade and a half, lower on a multiple-choice test than those students who were not using their phones. Students who were not using their mobile phones not only did 62% better on overall note taking, but also recorded 93% more outstanding answers in their notes than the group of students who were frequently using their mobile phones. Finally, students who were not using their mobile phones recalled 87% more minimally sufficient answers than the high distraction group and in general did substantially better at recalling information from the lecture. These findings provide clear evidence that students who use their mobile phones during class lectures tend to write down less information, recall less information, and perform worse on a multiple-choice test than those students who abstain from using their mobile phones during class.

5. Ryer, Megan. "Teacher versus Student Opinion: Cell Phones and Other Electronic Devices in School." *Northwest Missouri State University* (2012): 1-26.

Abstract

Recently at Maple Park High School [name changed], located in the South Kansas City School District [name changed], a research project was implemented to determine the effectiveness and usefulness of electronic devices in the classroom. The researcher provided a survey to both willing teachers and students asking their opinions about cell phones and other electronic devices, i.e. iPods, in the school setting. The survey included questions about the use of various electronic devices, how distracting and useful these devices were, and whether or not either party thought that they should be allowed in school. Questions were similar in design for both parties. Furthermore, data was collected from the survey and proved that teachers and students felt the same about the use of these devices in the classroom. They also felt the same about the distractibility of the devices in the classroom and on how efficiently they can be used as a teaching tool. Overall, at Maple Park High School, both teachers and students agreed that cell phones and other electronic devices should not be banned in the school setting.

III: Ryer's Summary of Additional Research

The end of Ryer's paper also provides a list of further research on this topic. Here is her review of this research (8-13):

Review of Literature

Technology is ever changing and with the invention of mobile wireless communications and advanced music technology, people of all ages now have resources accessible with the touch of a button. The majority of today's teenage student has both a cell phone and a music player, i.e. iPod, which is readily available to use in their high school setting. School districts have begun to implement cell phone and other electronic device policies in order to promote and maintain high student academic achievement. However, is this policy absolutely necessary? This is something that researchers have begun to study in order to showcase to educators what avenue to best travel in relation to cell phones and other electronic device use.

Cell phones and other electronic devices, i.e. iPods, have increasingly become a much greater distraction in the current classroom. A once limited item in the hand of a teenager is now something that all have. Yet, there are several ways for teachers to deal with the issue of disruptive cell phone usage. Many teachers have proclaimed their want for cell phones to be banned. However, cell phones are everywhere; students are able to play games, check e-mail, and take pictures, which all leave lesser attention to the material being presented during class (Gilroy, 2004). Still, Gilroy (2004) explains that students seem to believe that this has no effect on their academic achievement. What they don't understand is that it is hard for any human to concentrate fully on two things at once.

Therefore, most cell phones and other electronic devices can be seen as a huge distraction within the classroom. Even though most can be used with headphones to help students eliminate excess noise and allow them to focus, sometimes students end up emitting noise that is much louder than necessary. Anderson (2001) describes the effects of having a noisy classroom from either being from those things that can be prevented or from those that cannot be prevented, and cell phone and music player noise can definitely be prevented. Most teachers talk for over six hours a day and their voices may become strained from having to talk over large amounts of background noise, for example, loud iPod songs. Anderson (2001) explains that background noise is related to low student achievement and students that work in noisy conditions have lower attention span, less ability to focus, and tend to create more behavior problems.

However, "living in the now" with cell phones, has limited students need for planning in the future and keeping a high academic regiment. Richtel and Wollan (2011) provide several student accounts showcasing how they believe technology has been getting in the way of their schoolwork. For instance, one such female student had sent over 27,000 text messages in a month and blames these text messages for getting in the way of completing her homework (Richtel & Wollan, 2011). Richtel and Wollan (2011) explain the viewpoint of neurologists, where they believe that focusing too much energy on technology, such as the internet or cell phones, is not beneficial; down time and rest is needed away from these tools in order to be successful. Still, even though schools promote technology to better student's advancement in the future, teen's need to be aware of what is the most important thing to focus on. In addition, parents can help play a role in the cell phones students have by limiting what they are able to do on them (Gilroy, 2004). Gilroy (2004) implies that since cell phones will be around for a while, it is going to be a great effort to get students, teachers, and administrators all on the same boat in any cell phone policy.

Furthermore, resilient school policies are best created by looking at research collected from a variety of outside school policies and practices. In relation to cell phone policies and procedures, Obringer and Coffey (2007) provide a way to evaluate administrators' perceptions of cell phone issues and related policies. A survey was conducted based on the information gained through a literature review, panel of experts on the topic, and the implementation of a small pilot study at the researcher's university (Obringer & Coffey, 2007). Furthermore, the data shared from this research was collected through a survey that was mailed randomly to 200 high school principals throughout the United States (Obringer & Coffey, 2007). Over 50% of these administrators returned the survey which allowed findings to be examined thoroughly in: (1) high school policies, (2) parental support of these policies, (3) teacher's use of cell phones, (4) student disciplinary actions, and (5) misuses of cell phones by students (Obringer & Coffey, 2007).

While this being said, creating and implementing a consistent and successful cell phone and electronic device policy is something that all school districts need to consider as technology evolves. There are several suggestions that need to be taken into consideration of how to deal with students who use their cell phones during class. School districts need to take into account things that should and should not be done when creating a policy. For instance, Rosevear (2010) suggests using the same phrase each time a cell phone needs to be taken away so students know the procedure. In addition, Rosevear (2010) also explains not to play favorites and to provide the same consequence with each student. Other helpful tips to include when creating a consistent policy is to make sure before a teacher takes a phone, that it is off, teachers need to be a cell phone role model, and teachers should also be creative with consequences (Rosevear, 2010). If teachers can be consistent and stick to some of these techniques, the policy will be sound and the classroom will become a less distracting place.

In continuation, with a consistent cell phone and electronic device policy that keeps cell phones in the school setting, it is important to take a positive approach to implementing these devices in the classroom. Teachers are striving to get administrators on board to allow students to use cell phones in the classroom since school funding for supplies is becoming more and more limited (Ferriter, 2010). Ferriter (2010) suggests several simple tricks to breaking the negative connotation of cell phones in the classroom by, (1) making them visible, (2) showcasing a convincing application of cell phones in the classroom, and (3) using cell phones to replace necessary supplies. By following these strategies, administrators may be more open to new ideas.

Student's cell phones could save schools money and become useful tools, taking the place of once expensive resources. With the implementation of cell phone usage in the classroom, they can end up being used as a beneficial resource. Students and teachers have recently become huge users of wireless technologies; including, PDA's and SMS (short-message-service), also known as text messaging, messaging through mobile wireless cell phones (Kim, Holmes, & Mims, 2005). Rosevear (2010) explains that cell phones can be used to help teach summarizing and language through SMS. Cell phones in high school will also get students ready for future endeavors in the college setting. Scornavacca, Huff, and Marshall (2009) discuss the impact of using cell phones in classrooms at the university level and take into consideration the implications of using SMS, too. "Classroom Feedback Systems," such as clickers, have not been proven beneficial (Scornavacca et al., 2009). Moreover, with the new system called, TEXT 2 LRN, students are able to send, via SMS, questions and/or comments about the lecture being taught at that moment, along with providing a quick and easy way for teachers to survey or quiz students on information (Scornavacca et al., 2009). This system provides students and staff another communication resource, but does not relatively allow students to gain more knowledge by using this technology. Scornavacca et al. (2009) suggest that using cell phones in classrooms as a tool would increase active

participation and help decrease distractions, such as texting a friend in another room. Even though the uses are different between students and teachers, both are deemed beneficial by providing mobility and reachability (Kim et al., 2005). This would be relevant in both the high school and college setting. Kim et al. (2005) suggest that schools need to take advantage of these technologies and implement them into their classrooms to better help prepare their students for future success.

On the other hand, cell phones and other electronic devices are still seen by some as a burden in and outside of the classroom. Thompson and Cupples (2008) describe how cell phones can have a negative effect on a student's spelling, grammar, and communication skills while also frequently disrupting classroom learning time. Furthermore, Pierce and Vaca (2008) provide information relating to a study that was developed to explain the differences between teenagers that use communication technologies, and those that don't. The study included 517 high school students who had completed a self-report survey. The survey showed that 75% of these adolescents used MySpace and had a cell phone, and that more than half of them also had an IM account (Pierce & Vaca, 2008). Those that used all three of these technologies had significantly lower grades than teens that did not (Pierce & Vaca, 2008). The study also revealed that teenagers, who used these technologies when working on their homework or when procrastinating on their home to use these technologies, reported having lower grades. The research found that many students text message frequently during class and even text message sometimes during a test (Pierce & Vaca, 2008).

In conclusion, will technology advancements here to stay. It is important for school and their districts to establish a cell phone and other electronic device policy that is best for that school. Whether or not cell phones are banned or not, administrators and teachers need to make sure that their students are getting the best education possible. Teachers need to be educated on how cell phones can be used in the classroom successful in order for them to remain a substantial and effective part of the classroom.