

Sabbatical Leave Report - Cover Page

(to be completed upon return from sabbatical leave and submitted with your report)

Attached is my comprehensive Sabbatical Leave Report. I certify that I have fulfilled the objectives of my sabbatical leave and will render the amount of service required by District Policy – Administrative Procedure 7341.

NAME: Steve Isachsen

DATE SUBMITTED : September 9th, 2011

ACADEMIC SCHOOL YEAR IN WHICH LEAVE WAS TAKEN:2010/2011

SEMESTER IN WHICH LEAVE WAS TAKEN: Spring 2011

(NOTE: If this was a full-year leave or a variable leave, please indicate this. Do not include any unbanking as part of a sabbatical leave)

CHECK (X) TYPE OF SABBATICAL LEAVE: _____ Advanced Academic Studies, **or** ☒ Non-Traditional Activities

SIGNATURE :Steve Isachsen

(hard copy must include your actual signature on line above)

Applicant should not write below this line.

APPROVALS

Title	Approved? (Y/N)	Signature	Date
SLC Chair			
Academic Senate President			
Superintendent/ President			

Sabbatical Leave Report: Steve Isachsen

II. Restatement of Abstract of Sabbatical Leave Proposal

During the 2008-2009 academic year, through my work as Chair of the Faculty Textbook Affordability Committee, I developed an acute understanding of the ways textbook prices can impact MiraCosta students. One of the outcomes of the Committee's work was the MiraCosta Faculty Textbook Affordability Guidelines that were approved by the Academic Senate in April of 2009.¹

One of the many recommendations in this document was that faculty consider investigating the ways in which open educational resources might be used to enhance their course materials. Open educational resources are defined as those that, through a variety of methods including creative commons licensing, offer redistribution of content for non-commercial purposes for free.

Since then, the question has occurred to me over and over: could a portfolio of open educational resources be developed as a legitimate replacement for a traditional textbook in one of the Computer Studies Department's courses? Recent articles on this topic in the September 2009 California Community College Academic Senate Rostrum have further peaked my interest.

The purpose of this proposed sabbatical leave would be to embark on a journey to answer that question and to develop, as its outcome, a finished portfolio of open educational resources and materials for a single Computer Studies course along with an assessment of the experience and a list of best practices and lessons learned.

III. Completion of Objectives, Description of Activities

Objective #1:

- a. **Investigate applicable laws and regulations on the use of open educational resources in academic courses.**

I accomplished this objective through extensive research on copyright law, copyright fair use exemption, and the Creative Commons licensing movement as applied to field of higher education. The following is a brief summary of this investigation.

United States copyright law protects the fixed expression of ideas, meaning that without

¹ <http://www.miracosta.edu/textbookaffordability>

copyright release from the author, copyrighted materials may not be duplicated or shared. Based in the U.S. Constitution, the theory behind copyright law is that if creators are given an exclusive set of rights to control their work they will in turn have an economic incentive to create new works. Over the last 200 years the length of time copyright protection remains in place has been expanded, but once this protection expires the work enters the public domain. Works in the public domain are “publically available” and are not covered by copyright law.²

The concept of fair use provides an exemption from copyright protections when the materials are used specifically for educational purposes. This exemption, however, must meet the dual test of spontaneity and scope. Spontaneous use during the semester of a chapter or article excerpt that is short in relation to the entire chapter or article passes the test. Using those same excerpts beyond a temporary basis or using the entire chapter or article would not. Furthermore, the 2002 Technology, Education, and Copyright Harmonization (TEACH) Act provides several additional copyright exemptions specifically designed to address distance learning needs, though it does not supersede the concept of fair use.³

Relatedly, if a copyrighted work is visible on the Internet to anyone with the URL, extensive case law suggests that providing a hyperlink to that work would not result in copyright infringement as long as doing so does not create a route of distribution that circumvents mechanisms an author may have put in place for compensation, such as avoiding advertisements or payment systems through the use of deep-linking. As such, if appropriate routing is used, using hyperlinks to copyrighted content that has been intentionally made freely available by the author is not likely to be considered an infringing copy,⁴ which potentially gives educators and students an alternative way to access these educational resources.

However, even with such exemptions, copyright law and to a lesser extent fair use pose a challenge for educators who want to use copyrighted works in their courses for educational purposes. In most cases it remains necessary to either secure copyright release from the author or require students buy the original copyrighted works, i.e., textbooks. Even in situations where hyperlinking can be used, questions remain about student access and general accessibility issues related to these links.

In response to these difficulties, and supported by the emergence of the Internet, a philosophical shift on the topic of copyright has occurred among some authors and educators. Though originally designed to promote progress and innovation by allowing authors to protect their works and profit from them, these individuals feel that copyright has actually had the negative effect of restricting society’s general ability to share information in order to collaboratively increase knowledge as well as open access to that knowledge. In response to

² <http://www.copyright.gov/>

³ <http://www.copyright.gov/docs/regstat031301.html>

⁴ [http://ilt.eff.org/index.php/Ticketmaster v. Tickets.com](http://ilt.eff.org/index.php/Ticketmaster_v._Tickets.com)

this a non-profit company, Creative Commons, developed a open licensing concept that encourages authors to use one of their six license options to make their content available for use, sharing, and distribution without restricting access and usually for free. Common to this licensing model is that attribution must be given to the author.

The most open license offered by Creative Commons is the Attribution-ShareAlike CC BY-SA, which has the following profile: “This license lets others remix, tweak, and build upon your work even for commercial purposes, as long as they credit you and license their new creations under the identical terms. This license is often compared to “copyleft” free and open source software licenses. All new works based on yours will carry the same license, so any derivatives will also allow commercial use.”⁵ By contrast, the most restrictive Creative Commons license (though not restrictive compared to traditional copyright), is the Attribution-NonCommercial-NoDerivs license, which has the following profile: “This license is the most restrictive of our six main licenses, only allowing others to download your works and share them with others as long as they credit you, but they can’t change them in any way or use them commercially.”

This concept of open source content as facilitated by the Creative Commons licensing model has become the backbone of the Open Educational Resources (OER) movement. With a historical lineage that traces back to early open source software projects, the dual forces of the Internet, which makes sharing and building content accessible and scalable, and escalating textbook prices, has given rise to the idea that if course content is open it comes with little to no cost to the student and at the same time freely spurs the generation of new and derivative content, both of which contribute to the expansion of knowledge and access to higher education.

OER materials are generally defined as those educational resources that are freely available to everyone and typically accessible online. Examples include not only books, chapters, and articles but full courses and all accompanying materials such as video. In 1999 the MIT OpenCourseWare initiative was among the first to fully leverage this way of delivering material, but most recently (1/20/2011) OER has gained further legitimacy and national attention through a \$2 billion dollar US Department of Labor and Education grant. In part, the grant states: *“In order to further the goal of career training and education and encourage innovation in the development of new learning materials, as a condition of the receipt of a Trade Adjustment Assistance Community College and Career Training Grant (“Grant”), the Grantee will be required to license to the public (not including the Federal Government) all work created with the support of the grant (“Work”) under a Creative Commons Attribution 3.0 License (“License”). This License allows subsequent users to copy, distribute, transmit and adapt the copyrighted work and requires such users to attribute the work in the manner specified by the Grantee. Notice of the License shall be affixed to the Work.”*⁶

⁵ <http://creativecommons.org/licenses/>

⁶ <http://www.dol.gov/opa/media/press/eta/eta20101436.htm>

This type of licensing has begun to produce valid replacements for traditionally purchased textbooks. For example, the Community College Consortium for Open Educational Resources has cataloged over 250 textbooks that have used this Creative Commons licensing method so that faculty may assign them for free to students. In the most optimistic view, it is believed that these efforts will create a new paradigm where educators will have free 24/7 access to high-quality educational resources and these resources will be collaboratively produced as well as tailored for individual needs and context without restriction.

OER materials do not, however, come without disadvantages. Among the most prominent are: the difficulty in finding a cohesive set of materials for a course (customization is likely required to meet faculty needs); difficulties in meeting disabled student accessibility requirements; accuracy and validity of OER content (although this is true of commercial content as well); technical requirements to access online content; potential loss of revenue for campus bookstores; faculty member's expectations for free printed desk copies and ancillary instructor support materials.

As I embark on developing a portfolio of open educational resources that could be a legitimate replacement for a traditional textbook in one of the Computer Studies Department's courses, the copyright law, copyright fair use exemption, and the Creative Commons licensing model provide critical context for the types of materials I may seek to include. In addition, my work is informed by studies and regulations that speak to the question of whether a course that uses OER materials instead of a traditional textbook would still meet MiraCosta curriculum regulations as well as course articulation and transfer agreement requirements. This specific issue was addressed in an article in the September 2009 California Community College Academic Senate Rostrum co-authored by Richard Mahon, ASCCC Curriculum Committee chair, past chair, Transfer & Articulation Committee, Ken O'Donnell, Academic Program Planning, and CSU Office of the Chancellor Dawn Sheibani, CCC Articulation Analyst for the University of California. The authors clearly outline that the use of OER materials is not a obstacle for articulation and transfer agreements, as long as the materials adhere to the usual principles of range, depth, and rigor. They further state that, "Faculty need to consider the mix of materials they use to educate their students with care, but the fact that course materials originate on the Internet is not an obstacle to a course's potential to articulate and transfer."⁷ In addition, an in depth search of California Community College Education Regulations as contained in Title V produced no prohibition on the use of OER materials in place of a traditional textbook.

As I look forward toward Objective 5 of my sabbatical, *Select open educational resources and create a portfolio of open source resources for selected course*, I have several questions from my research associated with Objective 1: Is the concept of creating knowledge as a collective social product a viable way to produce educational content? Will I be able to create a collection of materials that is comprehensive enough with respect to range, depth, and rigor through the sole

⁷ http://asccc.org/sites/default/files/Rostrum/Rostrum_Sep09.pdf

use OER materials? Will I find a stand-alone textbook that has already been created and is available for use and adaptation under the Creative Commons licensing model? If I am unable to get everything I need to meet the course student learning outcomes, how might I be able to incorporate materials using the fair use exemption to copyright law without violating the dual test of spontaneity and scope; and, relatedly, how might I be able to use hyperlinking to leverage content that an author has already intentionally made freely available without circumventing the author's rights to compensation through controlled distribution? I am amazed by the volume and complexity of law and study in the area of copyright and even further by the controversy surrounding the fair use exemption and the various standards and court cases used to define the process by which one would test for its legal application. I am eager to address these questions as I proceed through my sabbatical.

Key resources from Objective 1:

Academic Senate for California Community Colleges: <http://asccc.org/>

Community College Consortium for Open Educational Resources: <http://oerconsortium.org>

Copyright Clearance Center: <http://www.copyright.com/>

Creative Commons: <http://creativecommons.org>

MIT OpenCourseWare: <http://ocw.mit.edu/index.htm>

OER Commons: <http://www.oercommons.org>

TEACH Act: <http://www.ala.org/ala/issuesadvocacy/copyright/teachact/index.cfm>

Title V, California Education Code:

<http://government.westlaw.com/linkedslice/default.asp?SP=CCR-1000>

United States Copyright Office: <http://www.copyright.gov/>

US Department of Education: <http://www.ed.gov>

US Department of Labor: <http://www.dol.gov/>

- b. The materials I produced in the fulfillment of this objective are the above summary included in section a) of Objective 1.
- c. I spent a total of 62 hours accomplishing this objective.

Objective #2:

- a. **Survey available open educational resources in the Computer Studies discipline.**

I accomplished this objective by performing an extensive search of Library and Internet open educational resources specifically related to the Computer Studies discipline. This effort included searching for collections of resources as well as individual books, chapters, periodicals, articles, instructional material, and videos. A summary of each resource (50+) I found, including its scope, availability, and content depth is included at the end of this report in Appendix A. I spent between 1 and 6 hours investigating each of the listed sites.

It is important to note that it would not be possible to identify every single available site related to OER, as this area is growing extremely fast (the number of sites dedicated to this issue has approximately quadrupled in size since I first proposed this sabbatical project). As such, I focused on those sites with the most promise as related to the curriculum I lead in the Computer Studies Department (see below). For every site listed there were at least two sites that I briefly reviewed but did not include; and, of those I did not include, many legitimate and robust sites, such as the Kahn Academy (<http://www.khanacademy.org/>), offered wonderfully rich and deep content, yet did not include any material related to computers. Kahn Academy, for example, focused primarily on Math, Biology, and Chemistry and this site alone, with support from the Bill and Melinda Gates Foundation, contained over 2000 videos dedicated to free instruction and learning via video. In the Math section every major math concept presented in K-12 education was covered.

Each site summary is broken in to two sections as indicated by the subtitles *Summary* and *Applicability*. The Summary section includes a general overview of the purpose of the site, how the site is organized, and the general topics contained within the site. Reflections are also included when warranted. The Applicability section describes what specific resources I found, if any, that might be applicable as an OER content resource for the Computer Studies and Information Technology (CSIT) curriculum I lead in the Computer Studies Department, which is as follows:

- CSIT 100: Computer Basics I
- CSIT 105: Computer Basics II
- CSIT 110: Computer Applications
- CSIT 115: Intermediate Computer Applications
- CSIT 125: Microsoft Word for Business
- CSIT 128: Microsoft Excel for Business
- CSIT 131: Microsoft Access for Business
- CSIT 134: Microsoft PowerPoint for Business
- CSIT 137: Google Apps for Business
- CSIT 155: Web 2.0
- CSIT 160: Technology, the Individual, and Society
- CSIT 195: Computer Studies Portfolio Development

In the Applicability sub section, I also include a hyperlink(s) to the specific resource(s) found as well as any initial reactions to what CSIT curriculum (by course number) for which that resource might have relevance. It should be noted that the individual resources found will not be investigated in depth (Objectives 4 and 5) until I have accomplished Objective 3 (selected a course).

Among the many specific findings noted in Appendix A, you will see my study also resulted in a number of more general insights regarding the potential use of OER materials in any discipline. For example, I was particularly struck by the volume of OER material dedicated to general education subjects, such as Math, History, Biology, etc. as opposed to more fluid topics, such as computer software. At first I thought content availability might correlate with how technical the topic was (the less technical the more material available), but this did not appear to be true as there was a wealth of material dedicated to many of the most complex Computer Science topics.

As I discuss in more detail below (Objective 3), it appears that this variability in available resources across disciplines is shaped by how likely any topic is to change over time. This helps explain why there is less information available on something like computer software topics, which must change with each new version of software; typically every 18-24 months. The greater the need for regular updates and current information, the less material there seems to be available. This may be because authors do not want to dedicate the time required to produce a free and open resource that will be outdated so quickly. I did, however, find ad and fee-based as well as copyrighted material that could be hyperlinked to available in this area at the foundation level.

Another significant finding from my review is that very few materials include the instructor ancillary supporting material. This remains an ongoing problem with the OER movement as while OER material might be available, it is rare to find an OER textbook or resource where the author has taken the time to develop such items as end of chapter questions, tutorial-based walkthrough exercises, test banks, supporting PowerPoint slides, and video or web based material. Therefore, one of the greatest choices as well as challenges an instructor faces when deciding whether to deploy OER material as a primary resource in a course is the degree to which there exists the ability to develop these materials on their own in a meaningful way.

This seemingly small issue may be one of the most significant reasons traditional textbook publishers have maintained control of the textbook market. Unlike educationally based OER initiatives, traditional textbook publishers have the resources to deploy large editorial teams to develop these materials, and over the years these materials have come to reflect a body of work that is often as large as the textbook itself. Moreover, the focus of this material has increasingly been on those types of materials that might make the instructor's job easier, and thus an intentional cycle of mutual dependency between the publisher and the adopting faculty member is created. Most recently this material has begun to take an increasingly digital focus, which relies on passwords and key codes to control electronic access in order to secure market niches as well as control the pace of adoption and edition upgrades. These strategies remain problematic hurdles for the world of OER.

In addition, I was surprised by the degree to which available OER content was dispersed across so many sites. While many sites claimed to host thousands of resources and be the "one-stop-shop" for OER, upon investigation there was no single site that fulfilled this role. Instead, there were many high quality sites that had specialized focus areas, typically either based on content and subject or on content type. For example, sites that just focused on OER video content; or sites that just focused on fully deployed open courses; or sites that just focused on providing a collection of organized hyperlinks to other sites. All of the sites are explored in depth in Appendix A and site-specific reflections, as well as comparisons among similar site types, are given when warranted. Indeed, the fledgling OER landscape is extremely scattered at this time.

To this end, there exists a clear opportunity for major initiative, whether grant funded or pursued through a corporate model, to create a single site that incorporates all topics, content, and content types together with robust search capabilities. My instinct is that this opportunity will be capitalized on in the next few years. It remains to be seen, however, whether that effort will be driven by educationally based, grant, governmental, or corporate based initiatives. Much of the progress will likely be driven by the general textbook market, the ways in which the issues I have noted above are addressed, and corresponding supply and demand.

As I look toward Objective 3, my extensive review of the OER materials landscape has revealed that the majority of what I found will most likely be best deployed within the lower level foundation related classes, such as CSIT 100 Computer Basics I. This finding is based on a course content outline structure that is fairly stable relative to the other courses. With a focus on foundation and basic skills related concepts, instructional material need not approach a technical level that demands the latest software iteration be used. For example, while there is a focus on understanding Windows and how files and folders work, there is not the need to demonstrate those skills within the Windows 7 environment in such a way that settings, properties, and security are specific to that version. And thus content on this topic might be applicable to Windows XP, Windows Vista, or Windows 7 and still be instructionally valid.

- b. The above summary along with Appendix A contain the materials I produced in the fulfillment of this objective.
- c. I spent a total of 144 hours accomplishing this objective.

Objective #3:

- a. **Choose a Computer Studies course that I teach for which it would be appropriate to develop a collection of open educational resources that could be used by any instructor and student.**

I accomplished Objective 3 by reviewing the Course Outlines of Record as well as OER resources (see Appendix A) for all of the courses I currently lead in the Computer Studies Department (see list in Objective 2 above). It became clear through my work on Objective 2 that there was an abundance of OER material available in certain curriculum areas but not others. The presence of this material, as well as its depth and range, seemed to correlate directly with how often the material might change over time. The more often the change, the less there was available material. For example, while there was some material relevant to CSIT 128, Microsoft Excel for Business, very little of that material was relevant to the current version, Microsoft Excel 2010. On the other hand, CSIT 100 Computer Basics I, which is more concept-based and has less material that is software version specific, had the most relevant material of any course available.

The inconsistency in content availability did not seem, however, to be related to how difficult or technical the subject matter might be. For example, there was a large variety of OER materials available in the Computer Science discipline. This discipline, however difficult or complex, relies on core concepts that over time have not varied greatly. Similarly, I came across, though did not review, a wide range of material (including many free textbook options) in the traditional general education fields of Math, Science, History, and Political Science. Like Computer Science, these fields rely on conceptual frameworks that over time have not varied greatly as compared to a field like software education, which changes rapidly as software versions change.

And thus, I found the depth and range of OER materials was especially strong in CSIT 100 Computer Basics I. This is the first in a two course sequence designed to introduce students to foundational concepts in the Computer Studies and Information Technology discipline and improve their basic computer literacy. Topics include basic computer techniques and literacy in

computer concepts, Windows, working with files and folders, word processing, browsing and searching the Web, sending and receiving email, and academic computing course management systems, such as Blackboard.

There were also quite a few materials relevant to CSIT 105 Computer Basics II, though this course is the follow-on to CSIT 100 and therefore its topics quickly become more version-specific. For example, while composing a word processing document using basic features common to several versions of Microsoft Word might be relevant to CSIT 100, CSIT 105's coverage of modifying the Quick Access toolbar makes it imperative that materials are relevant to the current version in which this particular skill and technique is covered.

While there was a lot of material that might be incorporated in to CSIT 110 Computer Applications, the Computer Studies Department's most popular class, this course attempts to maintain currency with certificate and business needs through always teaching, among other things, the most recent version of Microsoft Office. This is also important to ensure the course maintains its articulation agreements as well as relevancy to various MiraCosta certificate requirements. This fall 2011 the course will be moving from Microsoft 2007 to Microsoft Office 2010. In my survey of OER materials there were items related to Microsoft Office XP, 2003, and 2007, but very few related to Microsoft Office 2010. This is likely explained by the difficulty in keeping technical software topics that change every 18-24 months current in textbook form available on a free and open basis. Even the traditional publishers have difficulty accomplishing this, typically lagging a semester behind in textbook publishing from the actual software release date. CSIT 115 Intermediate Computer Applications faces this same issue, although more sharply.

CSIT 125 Microsoft Word for Business, CSIT 128 Microsoft Excel for Business, CSIT 131 Microsoft PowerPoint for Business, and CSIT 134 Microsoft Access for Business all face the same issue as CSIT 110 and 115, though in even more drastic terms. Each of these courses covers 10 chapters of content that is specifically aligned with the Microsoft Certification Exam competencies. It is critical that each course's content is up to date with the current software deployed in business as well as matched to the Microsoft Certification Exams. Publishers spend significant resources maintaining their "certification" of curriculum from Microsoft, which ensures the consumer that the material accurately maps to the certification exam they will eventually purchase. Books will typically indicate "MOS Certified by Microsoft" on the cover to convey this certification. Consequently, I did not find any significant OER resources that would be appropriate for these courses.

CSIT 137 Google Apps for Business deploys an "open" software model where, unlike Microsoft Office, access to this suite of products is free. CSIT 155 Web 2.0 also covers a collection of Web 2.0 applications and tools that are developed on this same open and free access model. Along with these models, however, comes comparatively even less stability in content as most of these types of applications are presented in a constant state of "beta." For example, Gmail, Google's email offering, consistently deploys new features without any predictable cycle. Just this past week Google integrated "Mark As Important" and "Mark As Not Important" buttons within the main toolbar header of the program in an effort to leverage data analytics to automatically determine through the use of "signals," such as who the user frequently emails or which emails the user keeps open longer than others, to help the user determine what emails they might find most important. This small though significant change requires instructional

material that, beyond Gmail's Help function, does not yet exist. Furthermore, the general Web 2.0 development and user ethos is that these tools should be, to the extent possible, not ones that require a guide, manual, textbook, or even explanation to use successfully. This is controversial in the educational community and in practice mostly untrue, as both of these classes are full of students wanting to learn these tools and their relevance each semester.

The other course, besides CSIT 100, where there was a significant amount of quality material available was CSIT 160 Technology, the Individual, and Society. This course was recently approved for the CSU and IGETC GE patterns and will be taught in the fall 2011 semester for the first time and therefore offers an opportunity to envision its textbook and related resources from the ground up. Upon closer review, however, the materials I found did not have a consistent theme or methodological approach. While individual items (chapters, articles, etc) will be useful on an ad hoc basis, this course will benefit from a cohesive set of materials that emphasizes a consistent thematic approach throughout the entire course.

Finally, focusing on developing a portfolio of materials for presentation to a future employer, CSIT 195 Computer Studies Portfolio Development is a class that is offered bi-yearly and thus represents a poor opportunity for the focus of this project. In addition, I found no material that might be relevant to this course.

In summary, upon review of the course outlines of records for all of the CSIT courses I lead, CSIT 100 offers the best opportunity for using open educational resources to both enhance the current course materials as well as develop a legitimate replacement for the currently adopted traditional textbook in place. As I move to Objective 4, I am excited about thoroughly investigating the available OER materials applicable to this course and comparing them to the traditional publisher textbook currently adopted for this course.

- b. The above report is material I produced in the fulfillment of this objective.
- c. I spent a total of 39 hours accomplishing this objective.

Objective #4:

- a. **Compare and evaluate open educational resources available for this course against traditional resources, such as publisher textbooks.**

The currently adopted textbook for CSIT 100 Computer Basics I is Welcome to the World of Computers, 2nd Edition, by Russel Stolins, Jill Murphy, and Bruce Robertson.:

<http://www.lablearning.com/151-6?sc=37&category=6500> This textbook is published by Labyrinth Learning: <http://www.lablearning.com/>

This textbook is organized in to the following seven units: Windows, Word Processing, Working with Files, Browsing Web Pages, Searching for Websites, Sending and Receiving Email and Attachments. These units are not in alignment with the Course Outline of Record (discussed in more detail in Objectives 5 and 6). In addition, several topics present in the course outline of record are not covered in this textbook.

This textbook comes with an instructor support CD, which includes ancillary instructor materials such as sample syllabi, lecture notes, PowerPoint presentations, student exercise files, exercise solution files, a test bank and answer keys. In addition, there is a student web page that contains PowerPoint presentations and lesson links. This web page is located at:

<http://labpub.com/learn/silver/wtwc3/>

This textbook is used for both CSIT 100 Computer Basics I and also for the Computer Basics 1-unit module as part of INTR 100 Foundations Skills for the College Experience. I adopted this textbook in the fall of 2010 for several reasons. First, from an instructional design perspective, the concept topics are presented in language that is easy to understand for new computer users and presented with rich examples that are relevant to college students' lives. These concept topics are then followed by hands-on exercises that give students experience in applying the skills and techniques effectively. Research shows that incorporating a learn and then do hands-on approach is the best method by which to reinforce computer applications in-class material.

In addition, my adoption decision was also influenced by this 261 page book being offered in a spiral bound format with black and white printing on medium quality paper. All of Labyrinth Learning's texts are published in ways specifically designed to reduce costs and this is their niche in the textbook publishing market. Moreover, they publish all of their textbook's net prices in a simple pricing guide: http://www.flipdocs.com/scripts/showbook.aspx?ID=10003606_104700 Rare in the textbook publishing world, the availability of transparent pricing means that students at any college where this textbook is adopted are paying the same price. This is very different from the pricing model other publishing companies in the computer education field use, such as Pearson, Cengage, and McGraw Hill. With these publishers it is not uncommon to find the same title packaged with various add-ons sold for a \$75 difference at two different colleges, and in some cases sold for even less than the textbook itself would be if it were adopted on its own. Though ostensibly assembled to maximize value, most often packages, by intentionally eliminating the used textbook market, rarely make sense unless their pricing is aggressively negotiated as part of an overall adoption strategy.

Currently the college bookstore sells the CSIT 100 textbook retail for \$30.75 new and \$23 used. This price is exceptionally low compared to the \$90 average per course cost of textbooks within the CSIT discipline and the nationwide general textbook average, which is more than \$100. This low price was one of the important factors in my decision to make this particular adoption.

When looking at the open educational resources gathered for CSIT 100 as part of Objective #, I did not find one single OER that would replace this textbook adoption. As discussed in Objective 2, there are likely many reasons for this, including the fact that the content cycle for this curriculum changes quickly and keeping a comprehensive text updated is challenging without market incentives. The alternative is to present individual OER material together as a collection that is aligned with the course outline of record. This is one of the clear advantages of OER. Doing this, however, presents the challenge that each individual resource's explanations and style of voice varies dramatically. While some concept topic explanations are easy to follow, others are too complex for this class audience. In addition, very few resources use the instructional design approach where concept explanations are followed with hands-on tutorial style walk-throughs within context examples that are relevant to college students.

Furthermore, while the Labyrinth Learning text provides an array of ancillary instructor support material, there is no instructor support material for the individual OER resources that might be gathered. This presents a formidable challenge to instructors who wish to use this material, as while the typical instructor model might be to use the textbook provided ancillary material to support a range of self-created material, using OER means that all material must be self-created.

With respect to pricing, if a similar amount of materials were gathered to create a 261 page textbook, these materials could be viewed and read online for free with no cost to the student. Many of these materials include more elaborate resources than if presented with the textbook, such as the inclusion of high quality color images, interactive walk-through multimedia modules, and video. This is a clear advantage of OER. If the same amount of material were printed, however, there becomes a question of whether that material for which the original copyright is still in place could be reprinted under fair use (unlikely) and thus copyright permissions may necessitate royalty payments. Without being able to hyperlink to a resource, a printed copy will likely violate the copyright restrictions.

Not considering this issue, however, if a student printed the material themselves from a printer at a typical cost of 10 cents a page, this material would cost the student \$26. It is acknowledged that a typical student would only print portions of the material and therefore the overall resulting final cost would likely be lower. On the other hand, if the material was duplicated by our on campus copy center (and copyright was not an issue) the price would be 3 cents a page or \$7.83. If it were sent outside the college it would be 4.5 cents a page or \$12. It then would need to be sold through the bookstore, which would necessitate a 35% markup for a final price of \$10 and \$15, respectively.

Alternatively, if the materials were packaged using the bookstore's course reader service, the final bookstore price would be \$14.90 for 100 copies or less or \$13.05 for 100 copies or more. Again, this does not include any copyright royalty fees which the bookstore's 3rd party vendor would need to work to secure, as necessary.

In summary, even OER material when printed may have costs to the students that are close to the costs the students would pay if the faculty member chose a lower priced offering or negotiated an aggressive price from the textbook publisher. It is questionable whether one could argue on the point of price that a \$23 used traditional textbook has any more or less value than a free resource offered by pdf that costs \$26 to print. Consequently, it should always be considered whether the price of the traditional textbooks is low relative to the OER material's quality and whether if without the additional instructor ancillary resources and with the need to update these resources often as content changes, its overall comparative value makes sense. The case, however, becomes clearer when a more expensive book is adopted that includes full color high quality pages that are necessary for detailed content illustration, more in depth or fluid material that are harder to find, and the use of industry certifications or content simulation and assessment tools that are impossible to duplicate without a pay-for-service model.

Irrespective of price, while the collection of materials I might put together might be current for this coming fall semester, it is likely not feasible to update this material each semester unless I am teaching the course. This fall I am teaching 2 sections of INTR 100 that use this material and in the spring I am not teaching the course. Adjunct faculty will teach the course and it will be their responsibility and prerogative whether to update the material or whether to use it at all.

For example, the current textbook covers Word Processing from a Word 2007 perspective, however, as of fall 2011 we will be teaching Office 2010. Similarly, the textbook teaches Internet Explorer from the Version 7 perspective while in the fall we will be likely using Version 8 or even perhaps Version 9, which was just released. At this basic level version differences can cause instructional havoc with materials that are not aligned to the version. Students when directed to pull down a menu and select a choice need to see the corresponding choice for that instruction to be effective. To some degree, the use and success of OER materials in this course will depend upon the degree to which they are kept up-to-date.

As I look to Objective 5, I am hopeful that I am able to find enough quality OER materials with sufficient depth, range, and record to map directly to the course content topics covered in the course outline of record.

- b. The above report is material I produced in the fulfillment of this objective.
- c. I spent a total of 60 hours accomplishing this objective.

Objective #5:

- a. **Select open educational resources and create a portfolio of open source resources for selected course.**

I accomplished this objective by re-reviewing the Course Outline of Record for CSIT 100. In my review I focused specifically on the outline of course content, which includes 7 major section topics with roughly 5 sub-topics per section. A total of 42 major and sub-topics identify the concepts, skills, and techniques to be taught in this course. Note that this outline of course content is included as part of website (hyperlink included below) that was developed for Objective 6 below.

Next I investigated in detail all of the CSIT 100 related open educational resources I had previously identified in Objective 2, Appendix A. This investigation included an analysis of each resource's range, depth, and rigor, and also its ease of use relative to this specific course's audience.

Finally, I identified which specific resources would map to the topics presented in CSIT 100's outline of course content. In cases where I found more than one resource related to a particular topic I included these as well. It is acknowledged that there are more resources included than there will be time to cover in this course and instructors are encouraged to use any or all of the material provided as needed and in compliance with the copyright restrictions noted in the Copyright notes (see below).

For each of the included resources I identified the following:

Topic: This field is designed to convey the general topic the resource covers.

Title: This is the actual title given to the resource by the resource author.

Copyright: Here I identified what the copyright restriction was on this particular resource. I provide a link to copyright holder, as well as an explanation of how the copyright affects the use of the resource. For example, whether or not a hyperlink must be provided or whether the resource can be downloaded, saved as part of this sabbatical project and presented to the viewer. This distinction is important, as hyperlinked content resources are in danger of being moved to new locations over time thus making them unusable. In cases where the copyright explanation is one that can be hyperlinked to, such as one of the various Creative Commons licenses, I provide a hyperlink to the wording of the copyright specifically.

Access to Resource: In this field I provide the actual hyperlink to the resource, whether external or internal.

Notes: Here I include any notes relevant to the resource, such as download instructions, what pages specific topics are covered on, etc.

- b. I produced the above report as well as the materials listed in Appendix B below (a .pdf printout of the website I created), which is a duplication of the website I created for Object 6 below to share these materials with faculty colleagues also teaching this course.
- c. I spent a total of 123 hours accomplishing this objective

Objective #6:

- a. **Set up a means, such as a website or other electronic file sharing method, for faculty colleagues teaching this course to use, at their option, the finished portfolio of open educational resources for the selected course.**

I reviewed several portfolio creation and online file sharing tools, though none were as effective at disseminating this type of information as a simple website. Software such as Keeboo, Hyperstudio, and FolioTek require purchase and have functionality that goes far beyond the simple scope of a web based e-portfolio. There are also open or generally free services, such as Edu-portfolio, Epsilen, and e-portfolios.net, but again their primary purposes, like the commercial software, is beyond the simple of scope of this project (for example, there is no need for online commenting, integration of student information systems, assessment methods, RSS feed integration, faculty review, etc.).

I have published all materials in fulfillment of Objective 5, and as shown in Appendix B, under the [Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License](https://creativecommons.org/licenses/by-nc-sa/3.0/) at the following website: www.miracosta.edu/home/sisachsen/sabbatical

- b. Appendix B as well as the material located at www.miracosta.edu/home/sisachsen/sabbatical contain the materials created in fulfillment of this objective.

- c. I spent a total of 139 hours accomplishing this objective.

Objective #7:

- a. **Assess the above experiences and compose a list of best practices and lessons learned for use of open educational resources in any course.**

Completing Objectives 1 through 6 proved to be a challenging yet rewarding experience. While the effort, as evidenced by this report, was successful it is clear that the field of OER while growing rapidly is still in its infancy. As explained in Objective 2, without a clear single OER repository, searching among the dozens of OER related sites is difficult and time consuming. Furthermore, the quality of materials varies widely and unlike some of the traditional disciplines, there exists very few single comprehensive options for the curriculum I lead in the Computer Studies Department. This makes the prospect of threading together resources as I have done in Appendix B for another course without the benefit of a sabbatical a daunting task. And even still, the final result lacks important ancillary instructor support materials. At this point, it is more likely that an instructor might find more value in choosing a textbook that is price-conscious and then using OER materials on a selective ad hoc basis to supplement and enrich the course. This may be the model for the foreseeable near future until a more consistent and holistic approach is taken to developing a single OER model for the curriculum I teach specifically. I am optimistic, however, that as various private and public grants take hold further quality OER materials will be developed in this area. I look forward to continuing to check back on this issue and consider materials for full adoption when this progress is made.

Overall, I am content with the set of materials I produced for CSIT 100 as a legitimate replacement for the Welcome to the World of Computers text. With the various instructors who teach this course, however, I suspect that without the ancillary instructor support materials these resources, unlike my original objective of finding a full replacement for the course text, will instead become additional resources to supplement the course text. Though I would encourage any faculty member to explore using these materials instead of the traditional textbook, I am comfortable with the notion that most, given the challenges I note throughout this report, will respectfully decline. That said, I am particularly satisfied with those resources I found that leverage multimedia and video content and my instinct is that these will be incorporated in to the course on a permanent basis as the current textbook does not offer equivalent resources.

With respect to best practices and lessons learned, the following are some of my more significant reflections:

- Traditional copyright is extremely restrictive and fair use as applied to education is often misused and misunderstood.
- Hyperlinking to copyrighted material is legal, as long as doing so does not create a route of distribution that circumvents mechanisms an author may have put in place for compensation.

- Open content development is faster and likely promotes progress and innovation more effectively than traditional copyright oriented closed content development.
- The Creative Commons licensing movement has become a legitimate way to leverage open content development and in the field of education will challenge traditional copyright in the future.
- Open Educational Resources (OER) offer a serious and viable alternative to traditional copyrighted materials.
- Public and private grants will continue to drive the OER market and the quality and availability of individual as well as comprehensive materials.
- The sole use of OER is not necessarily an impediment to transfer or articulation of courses.
- In some traditional disciplines, single OER textbooks exist; in others, for various reasons discussed throughout this report, they do not.
- Finding individual OER materials is a difficult and time-consuming process as there is no single gateway or portal to the world of OER.
- OER materials rarely offer any ancillary instructor support resources or desk copies. This remains one of the most significant barriers to full OER adoption.
- OER materials can present a challenge with respect to accessibility for all students but particularly disabled students.
- OER materials, when adopted, can lead to a potential loss of revenue for campus bookstores.
- OER quality varies widely (just like textbooks).
- OER is an exploding field that will only receive more attention and legitimacy over time as barriers are resolved.
- There is very little OER material in disciplines that change often. There is quite a bit in traditional disciplines.
- OER materials are most appropriately used as a significant single resource in courses where material is not fluid.
- There exists a clear opportunity for a major initiative to develop a single organized entity to repository OER.

- There is a range, depth, and rigor of OER material available for CSIT 100 and CSIT 160, but very little for CSIT 105, 110, 115, 125, 128, 131, 134, 137, 155, and 195.
 - The cost of OER when printed may not be competitive with lower cost publishers and thus the comparison becomes about quality of content and ease of use as opposed to cost.
 - When a single OER textbook is not available for a course it becomes necessary to string together individual OER resources, which is a difficult and time-consuming process.
 - Not all resources needed for a course will be OER oriented and thus it becomes necessary to incorporate copyrighted resources vis-à-vis hyperlinking and also integrate partial content through fair use.
 - When hyperlinking to a resource a problematic problem is introduced where the link address may change making the resource unusable.
 - A traditional website is the easiest and cheapest way to disseminate materials.
 - The [Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License](#) is the most open of the Creative Common licenses and allows users the most flexibility in sharing, reusing, and remixing content.
 - Deploying the steps (Objectives 1 through 6) of this model to other courses would range in difficulty and time depending on the subject matter. It would be straightforward to follow and reproduce for a History or Math course for example. But much more difficult if the content was fluid.
- b. The above report is a description of materials I produced in the fulfillment of this objective.
- c. I spent a total of 44 hours accomplishing this objective.

IV. **Contribution to the District**

- a. This project contributed to my professional development in several significant ways, including substantially increasing my knowledge and understanding of: applicable laws and regulations on the use of open source resources in academic courses; the body and scope of open educational resources available in the Computer Studies discipline; which Computer Studies course(s) would be appropriate for the use of open educational resources; the relative benefits and disadvantages of open educational resources compared to traditional resources for a specific course; how to set up and create a portfolio of open educational resources; and how to set up an effective website for sharing open educational resources, best practices, and lessons learned. I anticipate applying this knowledge throughout the courses I teach and lead in the Computer Studies Department.
- b. The impact of this project on:

- 1) Through completion of this project, MiraCosta students will now benefit from expanded opportunities, vis-à-vis use of free open educational resources instead of a traditional purchased textbook, to access class materials to achieve their learning objectives. In addition, it is anticipated that through the use of these resources students will benefit from a larger and more diverse pool of content that is deployed by instructors in an effort to reach their learning objectives and meet the course competencies.
- 2) Through completion of this project, the Computer Studies Department will now benefit from being able to a) review the best practices and lessons learned for potential wider implementation to other courses in the department and b) make available to all Department faculty the use of the finished portfolio of open educational resources at their option for the specified course.

I will also make efforts to share this information with my full and associate Departmental faculty colleagues in hopes that they too consider integrating OER materials in to the courses they teach and lead. In addition, this project has given me the perspective and ability to act as a trusted advisor or present professional development workshops to my colleagues on the subject of open educational resources and their use and integration in to MiraCosta courses.

- 3) Through completion of this project, MiraCosta College will now benefit from improved student access to the College, vis-à-vis use of free open educational resources instead of a traditional purchased textbook, which aligns with 2009/2010 Board Strategic Policy Goal 7: Improving Student Success and Access to the College. In addition, College colleagues will be able to review the best practices and lessons learned for use of open educational resources in any course at <http://www.miracosta.edu/home/sisachsen/sabbatical>. Finally, I will make efforts to share this knowledge with Departmental but also college colleagues through professional development workshops on the subject of open educational resources and their use and integration in to courses.
- 4) Through completion of this project, the Community will benefit from improved student access to the College, vis-à-vis use of free open educational resources instead of a traditional purchased textbook; and, the community will be able to identify a commitment to investigating open educational resources as a viable, potentially less expensive alternative to traditional textbooks. It is my hope that as faculty colleagues review this report and begin their own investigations in to the world of OER they too will become enthusiastic about OER's use in courses and this in turn leads to more courses with OER adoptions which will in turn will demonstrate a commitment to the community for providing student materials at the lowest possible price while not sacrificing depth, range, or rigor.

V. Documentation

- a. In addition to the Weekly Log Table documenting all hours spent on each objective shown on the last page of this report, Appendix A (related to Objective 2) and Appendix B (relate to

Objective 6) are included below. Finally, the following website was developed in support of Objective 5 and Objective 6: www.miracosta.edu/home/sisachsen/sabbatical

Acknowledgements

I wish to express a heartfelt thank you to the MiraCosta College Board of Trustees for granting me the privilege of this sabbatical leave.

Weekly Log Table

Hours Devoted to Each Activity							
Week Of:	Objective #1 Library; Internet research; Title V regulations review: 50 hours	Objective #2 Library; Internet research: 100 hours	Objective #3 Internet research; course catalog review; course outline of record review; colleague conversations: 50 hours	Objective #4 Library; Internet research; open educational resources review; desk copy review: 75 hours	Objective #5 Library; Internet research; select, compile, and arrange selected open educational resources; Select and use open source or other portfolio creation tool: 200 hours	Objective #6 Internet research to select and use website or other electronic file sharing method: 75 hours	Objective #7 Reflection and evaluation; use website or other electronic file sharing method to share results: 50 hours
1/17/2011	18						
1/24/2011	24						
1/31/2011	20						
2/7/2011		18					
2/14/2011		36					
2/21/2011		51					
2/28/2011		9					
3/7/2011		30	2				
3/14/2011			17				
3/21/2011			20	20			
3/28/2011				40	5	5	
4/4/2011					41	5	
4/11/2011					38	10	
4/18/2011					39	5	
4/25/2011						40	
5/2/2011						36	10
5/9/2011						38	14
5/16/2011							10
5/23/2011							10
Total Hours Accumulated for Each Activity	62	144	39	60	123	139	44

Sum total of hours completed for **approved** activities: 611

Appendix A

Objective #2 b.:

Note: Information and hyperlinks in Appendix A current as of June 15th, 2011.

Academic Earth: <http://academicearth.org>

Summary:

Academic Earth is an online collection of video lectures from selected courses at major universities. These high quality videos are available for free, though retain traditional copyright restrictions (hyperlinking to them is permissible). Subjects range from Astronomy to Writing. In the field of Computer Studies, there are 13 courses from Harvard, Stanford, MIT, and Berkeley that contain between 10-25 video lectures each. These courses are primarily in the areas of Computer Science, Programming Methodology, and Algorithms. I found one course comprised of 14 videos on introductory conceptual topics taught by David Malan at Harvard that may yield some material appropriate for CSIT 100, 105, and 110.

Applicability:

CSIT 100, 105, 110: Understanding Computers and the Internet:

<http://academicearth.org/courses/understanding-computers-and-the-internet>

Academic Commons: <http://www.academiccommons.org/>

Summary:

Academic Commons is an online community of faculty as well as others interested in the use of technology and how it informs a broad liberal education. With content built through contributions to the Academic Commons website, a rich professional development and commentary resource has been created. Hyperlinks are included to share and comment on submissions on a broad range of issues.

Applicability: There is little in this community that will apply to the curriculum I lead in the Computer Studies Department. However, from a faculty professional development standpoint, valuable information is provided on topics such as "Mobile Learning in Higher Education" and "Open Source E-Portfolio Solutions."

Bookboon: <http://www.bookboon.com>

Summary:

This site utilizes an untraditional publishing model where it contracts with the authors to produce books exclusively for their website. Bookboon then allows users to download .pdf copies of the books for free. Bookboon and the authors are compensated through marketing ads at Bookboon.com as well as by ads that are placed roughly every third page within the books themselves. In addition, in order to download the .pdf you must provide your email address for inclusion in their newsletter mailings, though user registration is not required. This site challenges the traditional notions of OER (which typically do not include any type of compensatory framework) yet includes content that is more recent than many OER sites.

Applicability:

CSIT 100, 110, 125: Microsoft Office Word <http://bookboon.com/int/student/it/microsoft-office-word>

CSIT 105, 110, 128: Microsoft Office Excel <http://bookboon.com/int/student/it/microsoft-office-excel>

CSIT 110, 131: Microsoft Office Access <http://bookboon.com/int/student/it/microsoft-office-access>

CSIT 110, 134: Microsoft Office PowerPoint <http://bookboon.com/int/student/it/microsoft-office-powerpoint>

College Open Textbooks: <http://www.collegeopentextbooks.org/>

Summary:

Supported by The William and Flora Hewlett Foundation, College Open Textbooks contains hyperlinks to a collection of open textbooks organized in to subject areas. This site includes a collaborative Google Doc that allows faculty to list their current traditional textbook choice along with price and then list what they have found that would be a comparable OER replacement. I was discouraged to see many faculty indicate they had found no comparable OER replacements for several of the exact same adoptions I currently utilize for the curriculum I lead.

Applicability:

In the Computer Science collection I found 113 available titles. Many of the titles held promise but were outdated, such as Microsoft Office XP for Business. Most titles were related to the Computer Programming discipline. All of these titles are free and available to use, but do have various Creative Commons licenses assigned to them. Specifically, I was encouraged to see the following titles that have direct correlation to the curriculum I lead:

CSIT 100, 110, 160: Blown to Bits: Your Life, Liberty, and Happiness After the Digital Explosion
<http://www.bitsbook.com/excerpts/>

CSIT 100, 110, 160: The Future of the Internet and How to Stop It
<http://futureoftheinternet.org/static/ZittrainTheFutureoftheInternet.pdf>

CSIT 110, 131: An introduction to Data and Information
<http://openlearn.open.ac.uk/course/view.php?id=2355>

CSIT 100, 105, 110, 125: Introduction to Word 2007
<https://vula.uct.ac.za/web/learnonline/manuals/CET%20MS%20Word%202007%20Training%20Manual%20v1.2.pdf>

CSIT 100, 105, 110, 125: Introduction to Excel 2007
<https://vula.uct.ac.za/web/learnonline/manuals/CET%20MS%20Excel%202007%20Training%20Manual%20v1.1.pdf>

CSIT 110, 125: Introduction to PowerPoint 2007
<https://vula.uct.ac.za/access/content/group/f779dbd8-4aa3-40c0-b0dd-be10f9392469/manuals/CET%20Powerpoint%202007%20Training%20Manual%20v1.1.pdf>

College Open Textbooks Community: <http://collegeopentextbooks.ning.com/>

Summary:

College Open Textbooks Community is a social networking site comprised of educators interested in OER. Discussions are divided in to content groups around themes such as Open Textbook Research, Accessibility, Adopter Communities, etc. Faculty discuss OER adoptions they are in the process of making and ask for feedback, suggestions, and reviews. There is no instructional content on this site but there are hyperlinks to other sites listed in this section.

Applicability:

While there was no applicable content, this may be a site to come back to if I would like peer feedback on some of the materials I eventually select in Objective 4 and 5.

Computing and Information Technology Interactive Digital Educational Library (CITIDEL):

<http://www.citidel.org/>

Summary:

CITIDEL is a repository of Computer Science education and research materials freely available for use in the classroom. Submitted by faculty, CITIDEL titles are organized in to collections and then larger communities around subjects entirely in the Computer Science discipline, with a focus on technical topics such as AJAX, Algorithm Visualization, Java Programming, etc.

Applicability:

There is quite a bit of material that would be relevant to MiraCosta's Computer Science discipline, but very little applicability to the more generalized curriculum I lead.

Community College Consortium for Open Educational Resources: <http://oerconsortium.org>

Summary:

This site represents a joint effort by several community colleges and universities, along with the League for Innovation in the Community College, to create a single site that encourages the development and use of OER in community college courses. The concept is that through institutions becoming members of the consortium (for a fee) faculty and student awareness of OER will rise, which in turn will lead to further development and adoption of OER materials on various repository sites, such as through its affiliation with College Open Textbooks (see above).

Applicability:

No relevant instructional material housed on this site, though MiraCosta should consider joining the consortium to promote OER (\$189 for three years) among its faculty and students.⁸

Connexions: <http://cnx.org/>

Summary:

Connexions is non-profit company that has designed a site that allows OER materials, in the form of modules ("small knowledge chunks"), to be created and posted by authors. Instructors as well as students can access over 17,000 learning modules housed by Connexions and then reorganize them in to chapters or books and distribute them for free. The Connexions concept is to allow "frictionless remixing" of OER and all materials use the Creative Commons CC-BY license (see Objective 1).⁹

Applicability:

The search for content function on Connexions needs further refinement. For example, a search for "Internet Explorer 7" yielded 100 results, none of which were relevant to instructional

⁸ <http://oerconsortium.org/cccoers-path-forward/membership-agreement-and-dues/>

⁹ <http://cnx.org/aboutus/>

resources for Internet Explorer 7. I found more success browsing by keyword and refining by letter. For example, when browsing by the letter S for software, I found many more modules (roughly 20, ranging from software architecture to software testing) than performing a keyword search for the word software. Overall, this site was a disappointment as it claims to be the largest repository of OER materials, yet its search function is slow, search results are not relevant to the search topic, and many results are in foreign languages without the ability to pre-filter these out. I did find some low quality content that may be applicable to the following curriculum.

CSIT 110: Computer and Information Processing <http://cnx.org/content/m27715/latest/>

CSIT 110, 160: Modules in Computer Ethics <http://cnx.org/content/col10423/latest/>

CSIT 110: Hardware and Software <http://cnx.org/content/m27262/latest/>

CSIT 110 and 131: What is a Database <http://cnx.org/content/m15098/latest/>

Curriki: <http://www.curriki.org/>

Summary:

Very similar to Connexions, Curriki allows educators at the K-12 level to create materials and share them without restriction. Content is presented in units, exercises, and lesson plans. I spent very little time on Curriki because of its focus on the K-12 audience. I did, however, find some valuable material that might be appropriate for the CSIT 100 Computer Basics I course, which has a basic skills focus.

Applicability:

CSIT 100: Building a PC http://www.curriki.org/xwiki/bin/view/Coll_rfischer/BuildingaPC

CSIT 100: Computers Across the Curriculum

http://www.curriki.org/xwiki/bin/view/Coll_driscoll/Computingacrossthecurriculum

CSIT 100: MS Word Lessons

http://www.curriki.org/xwiki/bin/view/Coll_tjolson/MSWordLessons?bc=

CSIT 100: What is Excel http://www.curriki.org/xwiki/bin/view/Coll_roxannes/WhatisExcel

CSIT 100, 110: Computer Ethics

http://www.curriki.org/xwiki/bin/view/Coll_A01214472/ComputerEthics

CSIT 100: Email Etiquette http://www.curriki.org/xwiki/bin/view/Coll_peter7812/EmailEtiquette

CSIT 100, 110: History of the Internet

http://www.curriki.org/xwiki/bin/view/Coll_roxannes/WhatisExcel

CSIT 110, 160: Digital Image Manipulation in the Mass Media

http://www.curriki.org/xwiki/bin/view/Coll_driscoll/DigitalImageManipulationintheMassMedia_0

Directory of Open Access Journals: <http://www.doaj.org>

Summary:

This site includes hyperlinks to 6400 “open” journals (journals that do not require a fee to view journal articles online) that can be explored using their search engine, of which 258 are

associated with the Computer Science discipline. Journal titles range from The Advances in Artificial Intelligence Journal to The Wireless Sensor Network Journal.

Applicability:

This site would be useful if looking for a specific journal article related to a class topic (and especially if research oriented). Most of the journals as well as journal article topics, however, are highly technical with most likely very little applicability to the foundational concepts or skills oriented material I lead.

Educational Resources Information Center (ERIC): <http://www.eric.ed.gov/>

Summary:

ERIC provides access to more than 1.3 million bibliographic records of journal articles. One of the important components of the ERIC database is its focus on grey literature in the field of education. These are resources that are not typically found through publishers yet represent recent works in the field that have non-commercial dissemination goals.

Applicability:

Like the Directory of Open Access Journals, ERIC would be useful if looking for a specific journal article related to a class topic (especially academic research oriented). Most of the journals and journal article topics are highly technical with most likely very little applicability to foundational concepts or skills oriented material.

Federal Resources for Educational Excellence (FREE): <http://www.free.ed.gov/>

Summary:

This site provides hyperlinks to teaching and learning resources created by many different federal government agencies. FREE includes hyperlinks to roughly 1500 federally supported resources.

Applicability:

In the broad area of Computers and Technology, this site included 14 extremely high quality hyperlinks to resources primarily from the National Science Foundation.

CSIT 100, 155, 160: Birth of the Internet

http://www.free.ed.gov/resource.cfm?resource_id=2074&subject_id=134&toplvl=42

CSIT 160: Your Place in Time

http://www.free.ed.gov/resource.cfm?resource_id=535&subject_id=134&toplvl=42

CSIT 160: Computing

http://www.free.ed.gov/resource.cfm?resource_id=1943&subject_id=134&toplvl=42

CSIT 160: Technology

http://www.free.ed.gov/resource.cfm?resource_id=1920&subject_id=134&toplvl=42

CSIT 110, 160: Cyberinfrastructure

http://www.free.ed.gov/resource.cfm?resource_id=1810&subject_id=134&toplvl=42

CSIT 100, 110, 160: The Next New Thing

http://www.free.ed.gov/resource.cfm?resource_id=2153&subject_id=29&toplvl=169

FreeComputerBooks.com: <http://freecomputerbooks.com/>

Summary:

This site does not host any materials but rather organizes and provides hyperlinks to free computer related books available on the web. Hyperlinks are categorized in to 13 topic areas and then further categorized in to over 200 subcategories. The focus of this site is on technical computer science related topics with a special emphasis on especially current topics such as Android phone programming and wireless applications. There is broad range in Microsoft computer applications texts: <http://freecomputerbooks.com/microsoftApplicationsBooks.html>

Applicability:

CSIT 100: Basic Computing Using Windows

http://en.wikibooks.org/wiki/Basic_Computing_Using_Windows

CSIT 110, 134: Learn Access Now <http://freecomputerbooks.com/Learn-Access-Now.html>

CSIT 110: Microsoft Office Live Small Business

http://freecomputerbooks.tradepub.com/free/w_pack05/?p=w_pack05

CSIT 100, 105, 110: The Complete Windows 7 Shortcuts <http://freecomputerbooks.com/The-Complete-Windows7-Shortcuts.html>

CSIT 155: Web Life 2.0: A Guide through the World Wide Web

<http://freecomputerbooks.com/Web-Life-2-0.html>

CSIT 160: The Future of Reputation: Gossip, Rumor, and Privacy on the Internet

<http://docs.law.gwu.edu/facweb/dsolove/Future-of-Reputation/text.htm>

CSIT 160: Emerging Privacy and Information Technology in a Digital Age

<http://freecomputerbooks.com/specialDigitalAgeBooks.html>

CSIT 160: The Digital Person – Technology and Privacy in the Information Age

<http://freecomputerbooks.com/specialDigitalAgeBooks.html>

CSIT 160: Trapped in the Net: The Unanticipated Consequences of Computerization

<http://freecomputerbooks.com/specialDigitalAgeBooks.html>

FreeLearning: <http://freelearning.bccampus.ca/>

Summary:

This Canadian site lists free learning resources from British Columbia based OER projects.

Applicability:

Using this site's search tools reveals resources primarily at Wikibooks and O'Reilly, both of which are reviewed separately in this section.

Free Technology Academy: <http://ftacademy.org/>

Summary:

The Free Technology Academy site is cosponsored by several participating European universities. It has 10 Information Technology textbook titles offered for free under the Creative

Commons license structure. These titles are clustered around free learning modules that when completed offer an online certificate recognized by the participating universities. In addition, completed modules are eligible for transfer in to a full Master's program at one of the participating universities as well.

Applicability:

CSIT 160: Legal Aspects of the Information Society: <http://ftacademy.org/materials/fsm/6#1>

FreeTechBooks: <http://www.freetechbooks.com/>

Summary:

FreeTechBooks is a site that provides lists of free books and textbooks in the field of computers. The lists are categorized by subject area and hyperlinks are provided. This site has a heavy focus on technical computer science books, with categories from Algorithms and Data Structures to Game Development and Multimedia. There are also hyperlinks in the areas of Math and Engineering.

Applicability:

CSIT 110: Storage Basics – An Introduction to the Fundamentals of Storage Technology
<http://www.freetechbooks.com/storage-basics-an-introduction-to-the-fundamentals-of-storage-technology-t774.html>

CSIT 131: Introduction to Relational Database Theory <http://www.freetechbooks.com/an-introduction-to-relational-database-theory-t819.html>

CSIT 137: 55 Ways to Have Fun with Google <http://www.freetechbooks.com/55-ways-to-have-fun-with-google-t634.html>

CSIT 160: A Companion to Digital Humanities <http://www.freetechbooks.com/a-companion-to-digital-humanities-t647.html>

CSIT 160: Introduction to Nanoelectronics <http://www.freetechbooks.com/introduction-to-nanoelectronics-t833.html>

HippoCampus: <http://www.hippocampus.org/>

Summary:

Developed by the Monterey Institute of Technology (MITE), HippoCampus provides multimedia content on general education topics. Access is open and free.

Applicability:

A review of this site revealed no OER materials related to the curriculum I lead.

How Stuff Works: <http://computer.howstuffworks.com/>

Summary:

How Stuff Works provides free educational explanations, including text, graphics, and video on a variety of topics. Owned by Discovery Communications, this site uses ad based revenue (text ads placed next to educational explanations or video ads preceding educational video content)

to fund its operations. All explanations are copyrighted by How Stuff Works, but hyperlinking to these explanations is permitted. There is an entire section of the site dedicated to Computer topics (<http://computer.howstuffworks.com/>), several of which are relevant to topics taught in Computer Studies courses.

Applicability:

CSIT 100, 110: What's Inside: Computer Hardware Channel

<http://computer.howstuffworks.com/computer-hardware-channel.htm>

CSIT 100, 110, 160: What's Inside: Computer Security Systems

<http://computer.howstuffworks.com/security-channel.htm>

CSIT 110, 160: How Microsoft Works <http://computer.howstuffworks.com/microsoft.htm>

CSIT 100, 105, 110, 125, 128, 131, 134, 160: What's Inside, Computer Software:

<http://computer.howstuffworks.com/microsoft.htm>

CSIT 137: Will Google Destroy Microsoft <http://computer.howstuffworks.com/google-microsoft.htm>

Flatworld Knowledge: <http://www.flatworldknowledge.com/>

Summary:

Flatworld Knowledge is a for-profit company that offers textbooks available for free adoption online. All textbooks are licensed under the Creative Commons method and instructors may remix and modify the textbooks as needed. Flatworld Knowledge generates revenue by offering these same textbooks for sale online in print formats and also by selling study aides and other ancillary material. The textbooks must be read online through the Flatworld Knowledge reader.

Applicability:

There are roughly 50 textbook titles available primarily focused in the Business, Economics, Management, and Marketing areas. There are five Information Systems titles, though none appropriate for the Computer Studies curriculum I lead. Specifically these texts focus on information systems for managers and project management.

Folksemantic: <http://www.folksemantic.com/>

Summary:

Folksemantic offers users the ability to sign up for an account where they can meet and collaborate with other educators interested in finding, discussing, and developing learning resources. In addition, they offer of a search tool that allows users to browse approximately 110,000 OER materials. Search results are provided in a series of hyperlinks that offer the ability to connect to them within the Folksemantic framework (the Folksemantic tools bar stays at the top of the screen throughout search results and subsequent clicks). In addition, Folksemantic offers the ability to "recommend" OER resources to fellow collaborators using a downloadable Folksemantic widget. The Folksemantic community might be one to consider joining as I do a more thorough search for OER related resources.

Applicability:

A search on key words related to the courses I teach produced no meaningful results. For example, a search on Microsoft Office produced as its first seven results, two historical documents about the history of Microsoft, two Math related documents for typesetting, and three Computer Skills Assessment Tests created in Qedoc (an online test and quiz generation tool). This source focused more on a variety of somewhat related OER resources than textbooks or OER materials specific to the terms being searched.

Global Text Project: <http://globaltext.terry.uga.edu/>

Summary:

Funded by the Jacobs Foundation, The Global Text Project focuses on online content development and distribution of open content electronic textbooks. This is the same initiative where Christina Hata in the MiraCosta Business Department found the open textbook she is using for her Small Business Management Course. The computers section contained 20 offerings of which 1 would have some limited applicability to CSIT 160. Most of the offerings that would have been applicable were outdated, such as Quick Start to Excel 2002 and Quick Start to Windows XP. Unique to The Global Text project is the attempt to further improve the textbooks they host by sharing and incorporating user feedback as they are adopted over time.

Applicability:

CSIT 160: Information Systems: A Manager's Guide to harnessing Technology
<http://www.gallaughier.com/chapters/>

Google for Educators: <http://www.google.com/educators/>

Summary:

Google for Educators is a site dedicated to using Google tools for the classroom. There are blogs, discussion groups, training documents, classroom activities, etc available for free use. The focus is primarily on Google's K-12 education initiatives, including the Google Teacher Academy.

Applicability:

There is a brief overview of Google's education related products along with ideas for integrating them in to the classroom. This would be a useful resource for the Google Apps for Business class, CSIT 137: http://www.google.com/educators/all_grades.html Furthermore, there is ongoing information about Google Apps for Higher Education at this hyperlink: <http://www.google.com/a/help/intl/en/edu/university.html>

Internet Archive: <http://www.archive.org/details/education>

Summary:

Started in 1996, the Internet Archive is a nonprofit organization that has built a digital library of historical OER resources. While it has a variety media types in its holdings, its primary strength

is in its video and audio archives. I found several computer related television and radio shows that will be particularly useful in CSIT 100, 105, and 110.

Applicability:

CSIT 100, 105, 110, 160: Computer Chronicles collection

<http://www.archive.org/details/computerchronicles>

CSIT 100, 105, 110, 160: Digital Tipping Point collection

<http://www.archive.org/details/digitaltippingpoint>

CSIT 100, 105, 110, 160: Net Café collection <http://www.archive.org/details/netcafe>

CSIT 100, 105, 110, 160: A History of the Personal Computer

http://www.archive.org/details/A_History_of_the_Personal_Computer

CSIT 100, 105, 110: Email Etiquette <http://www.archive.org/details/CareerServicesE-MailEtiquette>

CSIT 100, 105, 160: Extreme Web http://www.archive.org/details/nc351_xtreme_web

CSIT 160: Politics on the Web http://www.archive.org/details/nc103_cyberpolitics

CSIT 100: Apple Forever http://www.archive.org/details/CC605_apple_ii_forever

in pictures: <http://inpics.net/index.html>

Summary:

An online site that provides computer illustration based tutorials for free. The pictures provide walkthroughs based on a concept approach. For example, how to create a new document in Word is explained through the use of screenshots without long explanations.

Applicability:

CSIT 100, 105: Word 2007 <http://inpics.net/word07.html>

ItrainOnline: <http://www.itrainonline.org/itrainonline/english/index.shtml>

Summary:

ItrainOnline is a site that offers free computer and technology related materials online. The material can be reproduced or disseminated without restriction.

Applicability:

CSIT 100: Computer Basics <http://www.itrainonline.org/itrainonline/english/computers.shtml>

CSIT 100, 105, 110: Office Productivity Software

<http://www.itrainonline.org/itrainonline/english/office.shtml>

CSIT 100, 105: Internet and E-mail Basics

<http://www.itrainonline.org/itrainonline/english/internet.shtml>

CSIT 100, 105: Finding Information Online

<http://www.itrainonline.org/itrainonline/english/searching.shtml>

CSIT 100, 105, 110: Secure Computing

<http://www.itrainonline.org/itrainonline/english/security.shtml>

LeMill: <http://www.lemill.net/>

Summary:

Based in Finland, and with a primarily European focus, LeMill is a site used for finding, authoring, and sharing open learning resources. Browsing their informatics and ITC section, I found only 7 resources, all of which were not relevant to the curriculum I lead.

Applicability:

None.

LULU: www.lulu.com

Summary:

Lulu has created an “open publishing” model that attempts to bypass traditional publishers and enable authors to publish their content online and receive compensation for doing so. Lulu’s definition of “open” means that it is “free” for authors to publish their content through Lulu, as long as they agree that to share 20% of any profits generated from selling their books through the Lulu site.

Applicability:

This site does a nice job of providing less expensive books, as authors set their prices lower than they would be if they were subject to traditional textbook markup. There is, however, nothing free or open about the content on this site, and thus the use for the purposes of this project is of very little value.

Make Use Of: <http://www.makeuseof.com/>

Summary:

Make Use Of is a for-profit site that leverages Facebook as way to disseminate .pdf guides on computer and technology related topics. They have a group of authors on staff who write the guides using traditional copyright restrictions and then to “unlock” the guide list, you must “like” the Make Use Of page on Facebook. This allows the Make Use Of page to generate revenue via click-through ads and subsequent social networking of their page on to Friend’s pages. Like Bookboon (see above), this site challenges traditional OER conventions with a for-profit model that still provide contents technically for “free.”

Applicability:

There are several guides that provide well written summaries of various technology related issues relevant to the curriculum I lead.

CSIT 100, 105, 110: The Ultimate Windows 7 Guide, From Newbies to Pros

<http://www.makeuseof.com/pages/download-the-ultimate-windows-7-guide>

CSIT 100, 105, 110: The Guidebook to Internet Searching

<http://www.makeuseof.com/pages/guide-internet-searching>

CSIT 100, 110, 125: Your Guide to Create Professional Documents in Word

<http://www.makeuseof.com/pages/writing-professional-reports-documents>

CSIT 100, 105, 110: The Office Workers Guide To A USB Thumb Drive

<http://www.makeuseof.com/pages/download-guide-to-a-usb-thumb-drive>

CSIT 100, 105, 110: How the Internet Works <http://www.makeuseof.com/pages/download-how-the-internet-works>

CSIT 155: You'll Like This: The Facebook Marketing Guide

<http://www.makeuseof.com/pages/download-you-like-this-the-facebook-marketing-guide>

Maricopa Learning Exchange: <http://www.mccli.dist.maricopa.edu/mlx/>

Summary:

The Maricopa Learning Exchange is an online warehouse of resources hosted by the Maricopa Community College District in Arizona. Browsing the Computers section of the exchange revealed 10 packages from various community colleges in Arizona clustered around faculty and staff generated themes such as descriptions of projects to learn Microsoft Office or projects to train others in Microsoft Office. Mostly professional development oriented, this site contained very little if any material that could be applied to the classroom.

Applicability:

None.

Microsoft: <http://www.microsoft.com>

Summary:

As part of the support and help section of Microsoft's website, there are several free resources, including full length guides and short video tutorials that are feature-specific. Both of these types of resources have applicability to the curriculum I lead. More complete reference texts and textbook style offerings are offered for a fee through Microsoft Press. In addition, formal fee-based training as well as certification is offered by Microsoft and also through various Microsoft partners. For example, Microsoft offers a Windows 7 Essentials online course for \$14.99, see: www.microsoftlearning.com. I have listed some of the more applicable resources that may be hyperlinked to for use in the classroom.

Applicability:

CSIT 100, 105, 110, 125, 128, 131, 134: First Look Microsoft Office 2010

<http://office.microsoft.com/en-us/access-help/first-look-microsoft-office-2010-HA101822265.aspx?CTT=1>

CSIT 100, 105, 110, 125: Word 2010 <http://office.microsoft.com/en-us/word-help/>

CSIT 100, 105, 110, 125: Header and footer basics <http://office.microsoft.com/en-us/word-help/header-and-footer-basics-RZ010239449.aspx>

CSIT 105, 110, 128: Excel help and How-To <http://office.microsoft.com/en-us/excel-help/>

MIT OpenCourseWare: <http://ocw.mit.edu/index.htm>

Summary:

MIT OpenCourseWare contains approximately 2000 complete courses available for use under the Creative Commons license [Attribution-NonCommercial-ShareAlike 3.0](http://creativecommons.org/licenses/by-nc-sa/3.0/). There were six courses in the discipline areas of Computer Science and History that were relevant to the topics I

teach in the Computer Studies Department at MiraCosta. Specifically, I investigated the following three courses in significant depth: The History of Computing, Technology and Culture, and Technology in American History. In each of these courses, the syllabus, lecture notes, course calendar, essay questions, etc were available for viewing and re-use, with full copyright release. The course readings, however, were largely subject to traditional copyright law. Reading lists were provided with hyperlinks to buy the books in whole from Amazon and other sites, even though it was clear only specific chapters or pages were assigned for the course. These readings were assigned for the actual course at the time the course was taught through the use of a course reader with copyright release specific to that use or through the fair use exemption. No traditional textbooks were used in these largely seminar graduate style offerings. Overall the site was very easy to use but was heavy on upper division science and engineering courses most likely not appropriate for a community college audience. When a MIT OpenCourseWare user buys books via the hyperlinks to Amazon in the published reading lists, MIT OpenCourseWare receives 10% of the profits.

Applicability:

CSIT 160: The History of Computing: <http://ocw.mit.edu/courses/science-technology-and-society/sts-035-the-history-of-computing-spring-2004/index.htm>

CSIT 160: Technology and Culture: <http://ocw.mit.edu/courses/anthropology/21a-340j-technology-and-culture-fall-2006/>

Monterey Institute for Technology and Education (MITE): <http://www.montereyinstitute.org/>

Summary:

The Monterey Institute for Technology and Education provides free online resources for educational use. Its main initiative is its course repository (National Repository of Online Courses) as displayed through HippoCampus, reviewed separately in this section. It was disappointing to see an institute dedicated to Technology with no technology related courses in its repository available, though it did have a lot of depth in most general education areas.

Applicability:

None.

Multimedia Educational Resource for Learning and Online Teaching (MERLOT):

<http://www.merlot.org>

Summary:

Perhaps one of the best known sites for educators seeking free educational resources, MERLOT offers the ability to share learning materials, pedagogy, peer reviews and faculty development support services. Unlike most other sites, MERLOT gives users the ability review and rate materials, which helps in material selection. They have an entire section dedicated to Information Technology with sub topics in areas related to teaching, learning materials, and resources outside of merlot including professional journals, conferences, additional teaching resources, etc. When reviewing the learning materials area, there are sub topics such as

Applications, Information Literacy, and Web that will be directly applicable to the curriculum I lead. Some of these resources are listed below.

Applicability:

CSIT 105, 110, 128: Microsoft Excel tutorial and training videos

<http://www.merlot.org/merlot/viewMaterial.htm?id=297804>

CSIT 134: Drawing with PowerPoint II: Simple Animations

<http://www.merlot.org/merlot/viewMaterial.htm?id=244863>

CSIT 100: How to Use a Search Engine

<http://www.merlot.org/merlot/viewMaterial.htm?id=83582>

CSIT 100, 105, 100: Advanced Web Searching

<http://www.merlot.org/merlot/viewMaterial.htm?id=79442>

CSIT 100, 105, 110: How Operating Systems Work

<http://www.merlot.org/merlot/viewMaterial.htm?id=78531>

CSIT 110: How Computer Memory Works

<http://www.merlot.org/merlot/viewMaterial.htm?id=78549>

CSIT 100, 105, 110: Core Rules of Netiquette

<http://www.merlot.org/merlot/viewMaterial.htm?id=79436>

CSIT 100, 110, 125: Introduction to Microsoft Word 2007

<http://www.merlot.org/merlot/viewMaterial.htm?id=514991>

CSIT 100, 105, 110: Office 2007 <http://www.merlot.org/merlot/viewMaterial.htm?id=86170>

National Science Digital Library: <http://nsdl.org/>

Summary:

The National Science Digital Library is the National Science Foundation's online library of resources in the areas of science, engineering, math, and technology. All of its resources are accessible via the Internet, with items stored both in their library as well as at other digital libraries and accessible through hyperlinking.

Applicability:

CSIT 100: The Computer Comes Home: A History of Personal Computing <http://www.computer-museum.org/exhibits/pccomeshome/index.html>

CSIT 100, 105, 110, 160: Computer History Museum <http://www.computerhistory.org/>

CSIT 100: Technology Tutorials http://www.internet4classrooms.com/on-line_word.htm

OER Commons: <http://www.oercommons.org/>

Summary:

OER Commons serves as a repository for finding as well as sharing individual open educational resources to be used in courses. Using Web 2.0 related technology, users are encouraged to add hyperlinks to materials, projects, and reviews to the site to increase the number of open educational resources available to all viewers. Resources include textbooks, video lectures, lesson plans, simulations, etc and they are organized by subject area and grade level with content spanning the primary through post secondary levels. Each resource is assigned one of

four “conditions of use” labels: No Strings Attached; Remix and Share; Share Only; and, Read the Fine Print.

Applicability:

In the area of Science and Technology, 18,000 resources are available, and each resource is provided with a summary and hyperlink to find the resource at its housed location (not on OER Commons). There appears to be significant content depth in the area of Computers. For example, a search for PowerPoint yielded an Introduction to Microsoft PowerPoint 2007 guide hosted by the UCT OpenContent directory (a web portal for accessing open teaching and learning content from the University of Cape Town) and licensed under a Creative Commons Attribution-ShareAlike license. The guide, roughly the size of a traditional textbook chapter, was: well written, utilized rich color graphics; and was available for free pdf download. It did not, however, include any instructional exercises, tutorials, or cases.

CSIT 110, 134: <http://opencontent.uct.ac.za/node/77>

OpenCourse.org <http://opencourse.org/>

Summary: Supported by a grant from the National Science Foundation, OpenCourse.org is a virtual community that provides a space for teachers to collaborate on developing open resources (they use the term “reusable learning asset”).

Applicability: This site takes incredibly long to search. Typical searches yielded little to no results.

CSIT 160: History and Future of the Internet Age: <http://opencourse.org/Collaboratories/eh/eh-wiki/HistoryAndFutureOftheInternetAge/>

OpenCourseWare Consortium: <http://www.ocwconsortium.org/>

Summary: The OpenCourseWare Consortium is an online community designed to facilitate collaboration among educational institutions to create a repository of 5600 university-level open educational resources organized as courses. I reviewed over 100 courses and most of them were highly technical, such as Computational Methods in Aerospace Engineering, etc. The following three had some applicability to the curriculum I teach.

Applicability:

CSIT 100: Computers and Computer Systems

<http://openlearn.open.ac.uk/mod/oucontent/view.php?id=397593&printable=1>

CSIT 110, 160: Introduction to Ethics in Information and Computer Sciences

http://openlearn.open.ac.uk/course/view.php?name=ETHICS_1

CSIT 110, 131: Information Technology 1 <http://ocw.mit.edu/courses/sloan-school-of-management/15-564-information-technology-i-spring-2003/>

Open Culture: <http://www.openculture.com/>

Summary: Open Culture attempts to centralize free educational media for the lifelong learning audience.

Applicability:

CSIT 110, 160: Information Systems: A Manager's Guide to Harnessing Technology

<http://www.flatworldknowledge.com/pub/information-systems-managers-g/154689>

CSIT 100, 105, 110, 160: Understanding Computers and the Internet

<http://computerscience1.tv/2006/fall>

CSIT 100, 105, 110, 160: The Future of the Internet <http://itunes.apple.com/itunes-u/the-future-of-the-internet/id384229952>

CSIT 100, 105, 110, 160: Introduction to Computers <http://webcast.berkeley.edu/rss/course-archive.php?seriesid=1906978274>

CSIT 160: Future Tense http://www.npr.org/rss/podcast/podcast_detail.php?siteId=122980869

Open Education Resources Center for California: <http://grou.ps/oercenter/home>

Summary: The Open Education Resources Center was created by the California Community Colleges Board of Governors as a resource for faculty to use to help learn about OER and also find OER resources. In addition to hyperlinks to OER resources (all of which have been separately reviewed in this report), the site includes instructions on how to adopt OER resources, what California Community Colleges are promoting the use of OER, tools to store OER content as well as instructions on the open licensing process, and resources for making sure OER materials meet accessibility guidelines.

Applicability: None, however this is a good site for a introduction to the field of OER.

Open Learn: <http://www.open.ac.uk/openlearn/>

Summary: Supported by The William and Flora Hewlett Foundation, Open Learn is a site dedicated to hosting free open learning opportunities from The Open University. The Science, Math, and Technology section has over 1300 pages.

Applicability:

CSIT 110, 160: The incredible shrinking chip

http://openlearn.open.ac.uk/course/view.php?name=4RAIL_1

CSIT 110, 160: Information http://openlearn.open.ac.uk/course/view.php?name=T175_8

CSIT 100, 105, 110, 160: Finding information in information technology and computing

<http://openlearn.open.ac.uk/course/view.php?id=2370>

CSIT 100, 105, 110: ICTs in everyday life <http://openlearn.open.ac.uk/course/view.php?id=1666>

CSIT 100, 105, 100: Representing and manipulating data in computers

<http://openlearn.open.ac.uk/course/view.php?id=2575>

CSIT 131: The database development life cycle

<http://openlearn.open.ac.uk/course/view.php?id=2463>

Open Learning Initiative: <http://oli.web.cmu.edu/openlearning/>

Summary: Supported by Carnegie Mellon, the Open Learning Initiative builds team-developed online courses that attempt to enact instruction, provide open access, and develop a community around the use and further development and evaluation of these courses. Currently there are

13 fully deployed courses in traditional subjects such as Physics, Economics, and Chemistry. There are currently no offerings in the computer areas.

Applicability: OLI holds a lot of promise for creating high quality courses and will be a site to check back to in the future to see if they have anything has been developed in the area of computers.

Open.Michigan: <http://open.umich.edu>

Summary: Open.Michigan is a site that enables faculty and students to share educational resources. It contains course materials ranging from video to software tools that can be downloaded and remixed.

Applicability:

CSIT 160: Digital Government 2: Information Technology and Democratic Administration

<http://florida.theorange grove.org/og/items/bf4e70ac-725e-f4a7-c0d3-863a68bb45be/1/Sonys-Battle.pdf>

CST 110, 160: Introduction to Information Studies

<http://open.umich.edu/education/si/si110/winter2009>

O'Reilly Open Books: <http://oreilly.com/openbook/>

Summary: O'Reilly, a for-profit traditional publisher of technology oriented "trade books" has a portion of their website dedicated to open books. These are books that over the years O'Reilly, through work with their authors, have made available for free. Most all of the 50+ books available focus on highly technical topics, such as: X Toolkit Intrinsics Programming Manual for Version 11.

Applicability:

CSIT 160: Free as in Freedom <http://oreilly.com/openbook/freedom/index.html>

CSIT 155, 160: The Whole Internet User's Guide and Catalog

<http://www.archive.org/details/wholeinternet00krolmiss>

The Orange Grove: http://www.theorange grove.org/open_textbooks.asp

Summary: Through a partnership with the University Press of Florida, The Orange Grove provides a collection of texts that are downloadable free of charge.

Applicability:

CSIT 160: Computing Life http://florida.theorange grove.org/og/file/c3d54f03-c5ea-22cf-24ea-5ee7712ff228/1/computing_life.pdf

CSIT 160: Information Technology and the Networked Economy

<http://florida.theorange grove.org/og/file/49843a6a-9a9d-4bad-b4d4-d053f9cdf73e/1/InfoTechNetworkedEconomy.pdf>

CSIT 110, 160: Information Systems <http://florida.theorange grove.org/og/file/0743cd9c-4be2-e69a-c1a8-151d47b61f3f/1/InformationSystems.pdf>

CSIT 100, 105, 110, 160: The Journey Inside: A Fascinating Look Inside the World of Computers

<http://educate.intel.com/en/thejourneyinside/>

CSIT 100, 105, 110: History of the Internet <http://www.youtube.com/watch?v=9hIQjRMHTv4>

CSIT 160: Sony's Battle for Video Game Supremacy

<http://florida.theorange grove.org/og/items/bf4e70ac-725e-f4a7-c0d3-863a68bb45be/1/Sonys-Battle.pdf>

Project Gutenberg: http://www.gutenberg.org/wiki/Main_Page

Summary: Project Gutenberg has 33,000 free ebooks downloadable to read on most devices for free. Most books may be downloaded, copied, or reused. Many of the books held in this collection are in the public domain.

Applicability:

CSIT 160: Hackers, Heroes of the Computer Revolution <http://www.gutenberg.org/ebooks/729>

CSIT 100, 105, 110: The Secret Guide to Computers:

<http://www.secretguide.net/read/index.php?filename=spreadsheets>

CSIT 100, 105, 110: Email 101 <http://www.gutenberg.org/ebooks/75>

Sharing of Intellectual Assets (SOFIA): <http://sofia.fhda.edu/>

Summary: SOFIA is a full course repository for community colleges modeled after the MIT OpenCourseWare Initiative. Unlike many of the sites reviewed, which either provide hyperlinks to content or are learning object repositories, SOFIA provides full courses at a depth to which one would expect if they were actually teaching or taking the course. Currently there are 8 courses in the SOFIA database, of which the most notable is Musicianship II, authored by retired MiraCosta faculty Dave and Don Megill.

Applicability: There are three courses that have loose affiliation with the Computer Studies Department curriculum: Introduction to Java Programming, Introduction to Macromedia Flash, and Enterprise Network Security. At this time, however, there are no courses that would be suitable for use within the curriculum I lead.

Science, Math, Engineering and Technology Education (SMETE):

<http://www.smete.org/smete/>

Summary: Supported by the National Science Foundation, SMETE serves as a gateway to providing pedagogical material in the areas of science, math, engineering, and technology education. A review of the materials provides little relevance to the curriculum I teach, though I did find a small collection on spreadsheets.

Applicability:

CSIT 105, 110, 128: Excel Tutorial:

http://www.smete.org/smete/public/learning_objects/summary/?lo=E87CC39A-4B6A-4403-BCD2-AC020C6071CB

CSIT 105, 110, 128: How to Use a Spreadsheet:

http://www.smete.org/smete/public/learning_objects/summary/?lo=4CD39D21-DA9C-4B6A-8AD1-EA1390E8A527

TeacherTube: <http://www1.teachertube.com/>

Summary: TeacherTube is an online community designed to share instructional videos. Unlike YouTube, the content is limited to solely educational themes and video lengths are as long as 60 minutes. The site has an ad based format both as part of the search results (similar to Google) and as introductions to each video (similar to ads one might see before playing a video on a traditional website). While focused on a K-12 audience, there was quite a bit of material that might be applicable to CSIT 100.

Applicability:

CSIT 100, 105, 110: Basic Computer Components

[http://www1.teachertube.com/viewVideo.php?video_id=303&title=Basic Computer Components](http://www1.teachertube.com/viewVideo.php?video_id=303&title=Basic_Computer_Components)

CSIT 105: Excel Basics – Lesson 1:

[http://www1.teachertube.com/viewVideo.php?title=Excel Basics Lesson 1&video_id=7401](http://www1.teachertube.com/viewVideo.php?title=Excel_Basics_Lesson_1&video_id=7401)

CSIT 100: Be Cybersmart! Cyber Ethics and Bullying

[http://www1.teachertube.com/viewVideo.php?title=Be CyberSmart Cyber Ethics and Bullying&video_id=26584](http://www1.teachertube.com/viewVideo.php?title=Be_CyberSmart_Cyber_Ethics_and_Bullying&video_id=26584)

Textbooksfree.org <http://www.textbooksfree.org/>

Summary: Textbooksfree provides a simple but vast index of hyperlinks to OER resources and OER advocacy materials. No search tools are provided but hyperlinks are organized by category in alphabetical order.

Applicability:

CSIT 100, 105, 110, 125: Microsoft Word Internet Library

<http://www.businessbookmall.com/Word%20Internet%20Library.htm>

CSIT 105, 110, 128: Excel Internet Library

[http://www.businessbookmall.com/Microsoft Excel Directions For Beginners.htm](http://www.businessbookmall.com/Microsoft_Excel_Directions_For_Beginners.htm)

The National Academies Press: <http://www.nap.edu>

Summary: The National Academies Press publishes books each year on a wide range of issues in science and health policy. Some of their published books available in their online repository can be downloaded as .pdf documents for free.

Applicability:

CSIT 160: Realizing the Information Future, The Internet and Beyond

http://www.nap.edu/openbook.php?record_id=4755

CSIT 160: Computers at Risk, Safe Computing in the Internet Age

<http://www.nap.edu/openbook.php?isbn=0309043883>

UCT OpenContent: <http://opencontent.uct.ac.za/>

Summary: UCT Open Content is a web portal for accessing open education resources and it is supported by the University of Cape Town. Most of the material is of European origin and the site allows users to post their own open content.

Applicability:

CSIT 110: Discovering Information Systems: An Exploratory Approach

<http://opencontent.uct.ac.za/Commerce/Information-Systems/Discovering-Information-Systems-An-Exploratory-Approach>

CSIT 134: Introduction to PowerPoint 2007 <http://opencontent.uct.ac.za/node/77>

University South Carolina Library:

<http://www.sc.edu/library/science/scibooks.html#ComputerSci>

Summary: The University South Carolina's Library has a site that lists open books available online for free.

Applicability:

CSIT 100, 105, 110: Peter Norton's Introduction to Computers

<http://www.glencoe.com/ps/norton/update/>

CSIT 160: Tools For Thought: The People and Ideas of the Next Computer Revolution

<http://www.rheingold.com/texts/tft/>

videolectures.net <http://videolectures.net/Top/Computers/>

Summary: VideoLectures.net uses an editorial review process to provide free and open access to a educational video lectures repository.

Applicability:

CSIT 100, 105, 110, 160: The History of Computers

http://videolectures.net/stanfordcs106af07_sahami_lec04/

CSIT 155: Social media analysis and retrieval technologies

http://videolectures.net/translingeu2010_de_rijke_smart/

CSIT 155: Who Acquires Friends Through Social Media and Why

http://videolectures.net/icwsm2010_tufekci_waf/

CSIT 155: Got Facebook? Investigating What's Social About Social Media

http://videolectures.net/icwsm2010_watkins_ivs/

CSIT 160: Software Innovation – Do You Think the Last 20 Years Were Exciting? The Next 20 Years Will Blow Your Mind http://videolectures.net/mitworld_feld_si/

Wikibooks: http://en.wikibooks.org/wiki/Main_Page

Summary: Wikibooks is a collection of open-content textbooks that anyone can edit. Like all of the Wikipedia-based sites, the concept of collaborative consensus based writing is used to generate content. As community members work on books they move from freshly started, to partly developed, to half finished, to nearing completion, to completed. Critics of the sites argue that there is bias as well as inconsistencies that call in to question its reliability and accuracy. This is largely because its editorial process favors consensus over credentials. Studies have shown, however, that errors and “editorial vandalism” are corrected quickly and that its

accuracy level is on par with the Encyclopedia Britannica, though article writing style and structure varied widely (some written at a very high graduate level reading level and some written at a grade school level) because of the fact that there is a community of authors with varied backgrounds themselves. Because Wikipedia-based site content is distributed under an open license, anyone can re-distribute it freely.

Applicability:

CSIT 100, 105, 110: Microsoft Office http://en.wikibooks.org/wiki/Microsoft_Office

CSIT 137: Gmail <http://en.wikibooks.org/wiki/Gmail>

CSIT 160: Genes, Technology and Policy

http://en.wikibooks.org/wiki/Genes_Technology_and_Policy

CSIT 160: Computers and Society http://en.wikibooks.org/wiki/Computers_%26_Society

CSIT 160: Internet and Society http://en.wikibooks.org/wiki/Internet_and_Society

CSIT 100: Easy Guide to the Internet http://en.wikibooks.org/wiki/Easy_Guide_to_the_Internet

CSIT 110: Internet Technologies http://en.wikibooks.org/wiki/Internet_Technologies

CSIT 100: Computers for Beginning/The Basics

http://en.wikibooks.org/wiki/Computers_for_Beginners/The_Basics

CSIT 100: Computers for Beginners http://en.wikibooks.org/wiki/Computers_for_Beginners

CSIT 100, 105, 110, 160: The Computer Revolution

http://en.wikibooks.org/wiki/The_Computer_Revolution

WikiEducator: http://www.wikieducator.org/Main_Page

Summary: WikiEducator is a space for the educator community to plan, develop, and provide open resources. It encourages both individual materials and courses to be posted and collaboratively developed.

Applicability:

CSIT 100: Introduction to Computers http://wikieducator.org/Introduction_to_Computers

CSIT 100: Fundamental Computer Studies

http://wikieducator.org/Fundamental_Computer_Studies

CSIT 100: Intermediate Computer Studies

http://wikieducator.org/Intermediate_Computer_Studies

CSIT 100, 105, 110: Advanced Computer Studies

http://wikieducator.org/Advanced_Computer_Studies

Wikiversity: http://en.wikiversity.org/wiki/Wikiversity:Main_Page

Summary: Similar to Wikieducator, Wikiversity is a project developed to collaboratively develop open education resources. Content is organized by schools and emphasis is placed on learning groups and learning by doing. Learning is created by collaboration on projects that are based in Wikiversity pages exploring various topics. Learning pages include collections of webpages exploring various topics.

Applicability:

CSIT 100, 105, 110: Introduction to Computers

http://en.wikiversity.org/wiki/Introduction_to_Computers

CSIT 100, 105, 110: Introduction to Computer Science

http://en.wikiversity.org/wiki/Category:Introduction_to_Computer_Science

YouTubeEdu: <http://www.youtube.com/education?b=400>

Summary: YouTubeEdu is YouTube's education-specific site that is dedicated to enabling users to watch and share video they have created. Videos are listed in broad categories such as Engineering, Law, Social Science, etc. Furthermore there are specific "channels" dedicated to material from one source, such as the Purdue University Channel, which has 422 educational related videos available for viewing. Many of the major universities have their own dedicated channel with videos. Stanford's alone has over 1200 videos. In addition, there are channels from private ventures as well, such as the MyCompWorks channel that has a variety of computer related topic videos: <http://www.youtube.com/user/MyCompWorks>

Applicability:

Like YouTube, YouTubeEdu's content is extremely variable with some very high quality material and also some material that is not educationally sound – particularly those posted by individual users as opposed to University sanctioned channels. There is a tremendous amount of depth in the field of computers on YouTubeEdu. The following is a small sample of possibly applicable topics:

CSIT 100, 105, 110: Windows File Management

http://www.youtube.com/profile?feature=iv&annotation_id=annotation_839231&user=MyCompWorks#p/u/12/ueoOvrGC3rg

CSIT 100, 105, 110: Computer Files and Folders Computer File Management Basics

<http://www.youtube.com/watch?v=RMw6195Kr8>

CSIT 125: Intermediate Tips for Microsoft Word

http://www.youtube.com/watch?v=WYcT_p9rjJY

CSIT 128: Charts Tell the Real Story <http://www.youtube.com/watch?v=Z4F-sOeCcnY>

Appendix B

Objective #6 b.:

The print version of Appendix B begins on the next page. The web version is available at:
www.miracosta.edu/home/sisachsen/sabbatical

Note: Information and hyperlinks in Appendix B current as of June 15th, 2011. While link addresses successfully convert from the web to pdf, linked text does not. Links in Appendix B that do not work in pdf do work at the website above.

Steve Isachsen Sabbatical Web Site Spring 2011

Sabbatical Proposal

During the 2008-2009 academic year, through my work as Chair of the Faculty Textbook Affordability Committee, I developed an acute understanding of the ways textbook prices can impact MiraCosta students. One of the outcomes of the Committee's work was the MiraCosta Faculty Textbook Affordability Guidelines that were approved by the Academic Senate in April of 2009.

One of the many recommendations in this document was that faculty consider investigating the ways in which open educational resources might be used to enhance their course materials. Open educational resources are defined as those that, through a variety of methods including creative commons licensing, offer redistribution of content for non-commercial purposes for free.

Since then, the question has occurred to me over and over: could a portfolio of open educational resources be developed as a legitimate replacement for a traditional textbook in one of the Computer Studies Department's courses? Recent articles on this topic in the September 2009 California Community College Academic Senate Rostrum have further peaked my interest.

The purpose of this proposed sabbatical leave would be to embark on a journey to answer that question and to develop, as its outcome, a finished portfolio of open educational resources and materials for a single Computer Studies course along with an assessment of the experience and a list of best practices and lessons learned.

Sabbatical Report

A copy of the finished sabbatical report can be found at this link: [Steve Isachsen Sabbatical Report](#)

Objective 6

As explained in the Sabbatical Report, materials created in fulfillment of Objective 6 are located on this website. Objective 6 is as follows: *Set up a means, such as a website or other electronic file sharing method, for faculty colleagues teaching this course to use, at their option, the finished portfolio of open educational resources for the selected course.*

The above referenced materials can be found at this link: [CSIT 100 Computer Basics I, Open Educational Resources](#)

Copyright



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Acknowledgments

I wish to express a heartfelt thank you to the MiraCosta College Board of Trustees for granting the privilege of this sabbatical leave.

For questions about this sabbatical, please contact:

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Computer Studies Department

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760-757-2121 x6392

CSIT 100 Computer Basics I Open Educational Resources

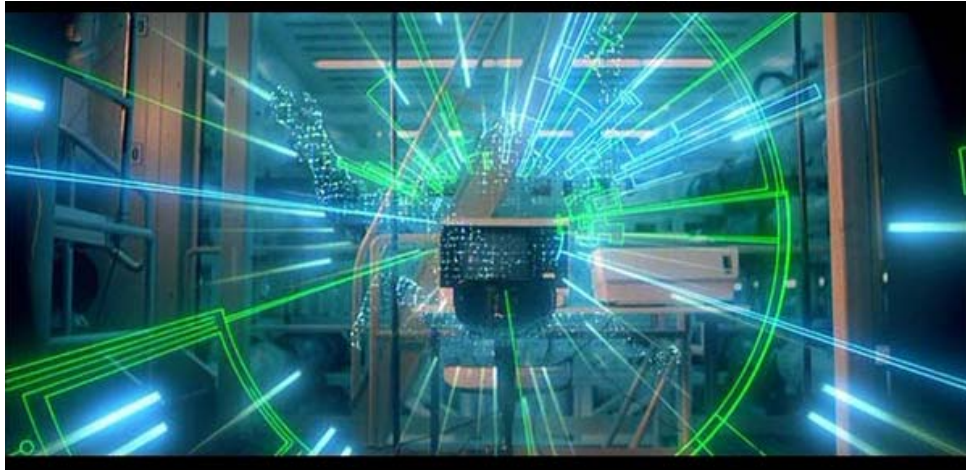


Image Licensed by [Chris Smart](#) under the [Creative Commons Attribution-NonCommercial-NoDerivs 3.0 License](#)

Overview

This website was developed in fulfillment of Objective 6 of Steve Isachsen's sabbatical. Objective 6 is as follows: *Set up a means, such as a website or other electronic file sharing method, for faculty colleagues teaching this course to use, at their option, the finished portfolio of open educational resources for the selected course.* A copy of the finished sabbatical report can be found at this link: [Steve Isachsen Sabbatical Report](#)

Copyright



All work related to this sabbatical is licensed by Steve Isachsen under the [Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License](#). Where hyperlinks to copyrighted works are provided, the copyrighted work's original copyright restriction remains in place.

Note: Information and hyperlinks below current as of May 27th, 2011.

CSIT 100 Computer Basics I

Course Description

This first in a two-course sequence is intended for students wishing to develop or strengthen their basic computer skills. Topics include basic computer techniques and literacy in computer concepts, Windows, working with files and folders, word processing, browsing and searching the Web, sending and receiving email, and academic computing course management systems, such as Blackboard. Upon successful completion of the course, students will be prepared for CSIT 105, Computer Basics II.

Open Educational Resources

The Open Educational Resources (OER) listed below are mapped to CSIT 100's Course Outline of Record. It is acknowledged that there are more resources included below than there will be time to cover in this course. Instructors are encouraged to use any or all of this material as needed and in compliance with the copyright restrictions noted below. To view CSIT 100's Course Outline of Record, go to this link: [CSIT 100 Course Outline of Record](#)

I. Understanding the computer

- A. Brief computer history
- B. Computer components, specifications, and operations
- C. Using the mouse and keyboard
- D. Setting up a new computer
- E. Turning computer off/on properly.

Topic: Basic Computing Skills

Title: Computer Basics

Resource Type: webpage text, graphics, screencapture, video

Copyright: Copyright [Microsoft](#), hyperlink created to copyrighted resources

Access to Resource:

<http://www.microsoft.com/about/corporatecitizenship/citizenship/giving/programs/up/digitalli>

Notes: None

Topic: Basic Computing Skills

Title: Working with Files and Folders

Resource Type: video

Copyright: Copyright [Top-Windows-Tutorials.com](#), hyperlink created to copyrighted resources

Access to Resource: <http://www.top-windows-tutorials.com/computer-basics.html>

Notes: None

Topic: Basic Computing Skills

Title: Essential Windows/PC Skills

Resource Type: webpage text based format

Copyright: Copyright [Internet4Classrooms](#), hyperlink created to copyrighted resources

Access to Resource: http://www.internet4classrooms.com/entry_level_pc_index_ie.htm

Notes: Topics include using the mouse, keyboard

Topic: Computer Hardware Basics

Title: what's inside: computer hardware channel

Resource Type: website, graphics, video

Copyright: Copyright [HowStuffWorks, Inc.](#), hyperlink created to copyrighted resources

Access to Resource: <http://computer.howstuffworks.com/computer-hardware-channel.htm>

Notes: Topics include desktop, cpu, memory, networking

Topic: Inside the PC

Title: Your PC Inside and Out, Part 1 and Part 2

Resource Type: book/guide in pdf format

Copyright: Copyright [MakeUseOf](#), hyperlink created to copyrighted resources

Access to Resource: <http://www.facebook.com/makeuseof>

Notes: To gain access to these resources, go to <http://www.facebook.com/makeuseof>, at the bottom left click "All Make Use of Guides," at the top click "Like." This will "unlock" all of the MakeUseOf pdf guides. Scroll down and find the guides listed in the title above and click to open or right click to save to the desktop.

Topic: Basic Computer Concepts

Title: Basic Computing Using Windows

Resource Type: book in pdf format

Copyright: Copyright [Free Software Foundation](#), licensed for free use under the [GNU Free Documentation License](#)

Access to Resource:

<http://www.miracosta.edu/home/sisachsen/sabbatical/12basiccomputingusingwindows.pdf>

Notes: None

Topic: A Tour of the Digital Landscape and Its Effect on Society

Title: Digital Explosion Why Is It Happening, and What Is at Stake?

Resource Type: book chapter in pdf format

Copyright: Licensed by [Hal Abelson, Ken Ledeen, and Harry Lewis](#) under the [Creative Commons Attribution-Noncommercial-Share Alike 3.0 Unported License](#)

Access to Resource:

<http://www.miracosta.edu/home/sisachsen/sabbatical/1digitalexplosion.pdf>

Notes: Pages 1-17

Topic: Basic Concepts in Information Processing and Computer History by Generation

Title: Information and Information Processing

Resource Type: web page in pdf format

Copyright: Licensed by [Huong Nguyen](#) under the [Creative Commons Attribution 3.0 Unported License](#)

Access to Resource: <http://www.miracosta.edu/home/sisachsen/sabbatical/1information.pdf>

Notes: Brief definitions and presentation of the data, information, knowledge, wisdom construct

Topic: Exploring Present and Future Technological Innovations

Title: The Next New Thing

Resource Type: pamphlet in pdf format

Copyright: Copyright [U.S. Department of State](#), express copyright reproduction release for the public domain

Access to

Resource: <http://www.miracosta.edu/home/sisachsen/sabbatical/1nextnewthing.pdf>

Notes: Innovation Pages 2-3, Nanotechnology Pages 8-11, Social Networking Pages 12-15

Topic: History of the Personal Computer

Title: The Computer Comes Home: A History of Personal Computing

Resource Type: text based website with images

Copyright: Copyright [Computer Museum of America](#), hyperlink created to copyrighted

resources

Access to Resource: <http://www.computer-museum.org/exhibits/pccomeshome/index.html>

Notes: None

II. Desktop and Windows basics

A. Desktop

B. Taskbar and start menu

C. Open, close, resize, and move windows

D. Menus, buttons, bars, and boxes

E. Windows help system.

Topic: Windows 7 Basics

Title: Working with Files and Folders

Resource Type: video

Copyright: Copyright [Top-Windows-Tutorials.com](http://www.top-windows-tutorials.com), hyperlink created to copyrighted resources

Access to Resource: <http://www.top-windows-tutorials.com/windows-7.html>

Notes: None

Topic: The Windows 7 Taskbar

Title: Windows 7 Using the Taskbar Effectively

Resource Type: book/guide in pdf format

Copyright: Copyright [Internet4Classrooms](http://www.internet4classrooms.com), hyperlink created to copyrighted resources

Access to Resource:

http://www.internet4classrooms.com/technology_tutorials/windows_7_taskbar.htm

Notes: None

Title: Essential Windows/PC Skills

Resource Type: webpage text based format

Copyright: Copyright [Internet4Classrooms](http://www.internet4classrooms.com), hyperlink created to copyrighted resources

Access to Resource: http://www.internet4classrooms.com/entry_level_pc_index_ie.htm

Notes: Managing the desktop and windows

Topic: Basic Windows Concepts

Title: The Ultimate Windows 7 Guide from Newbies to Pros

Resource Type: book/guide in pdf format

Copyright: Copyright [MakeUseOf](http://www.facebook.com/makeuseof), hyperlink created to copyrighted resources

Access to Resource: <http://www.facebook.com/makeuseof>

Notes: To gain access to this resource, go to <http://www.facebook.com/makeuseof>, at the bottom left click "All Make Use of Guides," at the top click "Like." This will "unlock" all of the MakeUseOf pdf guides. Scroll down and find the guide listed in the title above and click to open or right click to save to the desktop.

Topic: Basic Computer Concepts

Title: Basic Computing Using Windows

Resource Type: book in pdf format

Copyright: Copyright [Free Software Foundation](#) licensed for free use under the [GNU Free Documentation License](#)

Access to Resource:

<http://www.miracosta.edu/home/sisachsen/sabbatical/12basiccomputingusingwindows.pdf>

Notes: Page 10 desktop, Pages 15-18 files and folders

Topic: Windows 7 Shortcuts Overview and Explanations

Title: The Complete Windows Shortcuts eBook

Resource Type: guide in pdf format

Copyright: Copyright [Nitin Agarwal](#), express copyright reproduction release

Access to Resource:

<http://www.miracosta.edu/home/sisachsen/sabbatical/2windowsshortcuts.pdf>

Notes: None

III. Applications, files, and folders basics

- A. Open and close various applications
- B. Folder and file organization overview
- C. My documents
- D. Moving, copying, deleting, and restoring files
- E. Basic USB storage device overview.

Topic: How to use a USB Storage Device

Title: The Office Worker's 101 Guide to a USB Thumb Drive

Resource Type: book/guide in pdf format

Copyright: Copyright [MakeUseOf](#), hyperlink created to copyrighted resources

Access to Resource: <http://www.facebook.com/makeuseof>

Notes: To gain access to this resource, go to <http://www.facebook.com/makeuseof>, at the bottom left click "All Make Use of Guides," at the top click "Like." This will "unlock" all of the MakeUseOf pdf guides. Scroll down and find the guide listed in the title above and click to open or right click to save to the desktop.

Topic: Working with Files and Folders

Title: Working with Files and Folders

Resource Type: video

Copyright: Copyright [Top-Windows-Tutorials.com](#), hyperlink created to copyrighted resources

Access to Resource: <http://www.top-windows-tutorials.com/windows-7-tutorial6.html>

Notes: None

Topic: Working with Files and Folders

Title: Working with Files and Folders

Resource Type: webpage text and images

Copyright: Copyright [Microsoft](#), hyperlink created to copyrighted resources

Access to Resource: <http://windows.microsoft.com/en-US/windows-vista/Working-with-files-and-folders>

Notes: None

Topic: Basic Computing Skills

Title: Essential Windows/PC Skills

Resource Type: webpage text based format

Copyright: Copyright [Internet4Classrooms](#), hyperlink created to copyrighted resources

Access to Resource: http://www.internet4classrooms.com/entry_level_pc_index_ie.htm

Notes: Saving a document

Topic: Restoring Files

Title: Recover Lost or Deleted Files

Resource Type: webpage text based format

Copyright: Copyright [Microsoft](#), hyperlink created to copyrighted resources

Access to Resource: <http://windows.microsoft.com/en-US/windows7/Recover-lost-or-deleted-files>

Notes:

IV. Word processing basics

A. Open and close document

B. Typing text and cut, copy, and paste

C. Save; Save As

D. Printing

E. Word processing help system.

Topic: Word 2010 Basics

Title: Word Help and How-To

Resource Type: webpage topic based tutorial modules using text and screenshots

Copyright: Copyright [Microsoft](#), hyperlink created to copyrighted material

Access to Resource: <http://office.microsoft.com/en-us/word-help/>

Notes: None

Topic: Word 2010 Basics

Title: Office 2010 Ultimate Tips and Tricks

Resource Type: book/guide in pdf format

Copyright: Copyright [MakeUseOf](#), hyperlink created to copyrighted resources

Access to Resource: http://www.facebook.com/makeuseof?sk=app_100527483349677

Notes: To gain access to this resource, go to the link above in Facebook, at bottom left click

VIP: Get Latest Guide, click Unlock the Download.

Topic: Transitioning from Office 2007 to Office 2010

Title: First Look: Microsoft Office 2010

Resource Type: webpage topic-based tutorial modules using text and screenshots

Copyright: Copyright [Microsoft](#), hyperlink created to copyrighted material

Access to Resource: <http://office.microsoft.com/en-us/access-help/first-look-microsoft-office-2010-HA101822265.aspx?CTT=1>

Notes: None

Topic: Word 2007 Basics

Title: Microsoft Word 2007 In Pictures

Resource Type: text and image step-by-step topic based walkthroughs

Copyright: Copyright [inpictures](#), hyperlink created to copyrighted material

Access to Resource: <http://inpics.net/word07.html>

Notes: None

Topic: Features Involved in Creating Professional Word Documents

Title: Your Guide to Create Professional Documents in Word

Resource Type: book/guide in pdf format

Copyright: Copyright [MakeUseOf](#), hyperlink created to copyrighted resources

Access to Resource: <http://www.facebook.com/makeuseof>

Notes: To gain access to this resource, go to <http://www.facebook.com/makeuseof>, at the bottom left click "All Make Use of Guides," at the top click "Like." This will "unlock" all of the MakeUseOf pdf guides. Scroll down and find the guide listed in the title above and click to open or right click to save to the desktop.

V. Web browser basics

A. Connecting to the Internet

B. Address bar and hyperlinks

C. Keyword searches

D. Bookmarks

E. History view.

Topic: Tabbed Browsing in Internet Explorer 7

Title: Working with Files and Folders

Resource Type: video

Copyright: Copyright [Top-Windows-Tutorials.com](#), hyperlink created to copyrighted resources

Access to Resource: <http://www.top-windows-tutorials.com/tabbed-browsing-ie7.html>

Notes: None

Topic: Downloading Files in Internet Explorer 7/8/9

Title: Working with Files and Folders

Resource Type: video

Copyright: Copyright [Top-Windows-Tutorials.com](#), hyperlink created to copyrighted resources

Access to Resource: <http://www.top-windows-tutorials.com/how-to-download-ie9.html>

Notes: None

Topic: Etiquette on the Web

Title: The Core Rules of Netiquette

Resource Type: text based webpage

Copyright: Copyright [Albion.com and Seth Ross](#), hyperlink created to copyrighted resources

Access to Resource: <http://www.albion.com/netiquette/corerules.html>

Notes: None

Topic: Basic Computing Skills

Title: Essential Windows/PC Skills

Resource Type: webpage text based format

Copyright: Copyright [Internet4Classrooms](#), hyperlink created to copyrighted resources

Access to Resource: http://www.internet4classrooms.com/entry_level_pc_index_ie.htm

Notes: URLs, navigating, IE menus, favorites, searching the web

Topic: History of the Internet

Title: History of the Internet

Resource Type: video

Copyright: Copyright [Melih Bilgil](#), hyperlink created to copyrighted resources

Access to Resource: <http://www.youtube.com/watch?v=9hIQjrMHTv4>

Notes: None

Topic: Cyberethics and Appropriate Use of Technology

Title: Be Cybersmart! CyberEthics and Bullying

Resource Type: video

Copyright: Copyright [TeacherTube.com](#), hyperlink created to copyrighted resources

Access to Resource: http://www1.teachertube.com/viewVideo.php?title=Be_CyberSmart_Cyber_Ethics_and_Bullying&video_id=26584

Notes: None

Topic: History of the Internet

Title: Birth of the Internet

Resource Type: interactive multimedia modules with video

Copyright: Copyright [National Science Foundation](#), express copyright reproduction release for the public domain

Access to Resource: http://www.nsf.gov/news/special_reports/nsf-net/

Notes: None

Topic: How the Internet Works

Title: How the Internet Works

Resource Type: book/guide in pdf format

Copyright: Copyright [MakeUseOf](#), hyperlink created to copyrighted resources

Access to Resource: <http://www.facebook.com/makeuseof>

Notes: To gain access to this resource, go to <http://www.facebook.com/makeuseof>, at the bottom left click "All Make Use of Guides," at the top click "Like." This will "unlock" all of the MakeUseOf pdf guides. Scroll down and find the guide listed in the title above and click to open or right click to save to the desktop.

Topic: Computer and Internet Security and Privacy

Title: Security

Resource Type: lecture captured on video

Copyright: Licensed by [David J. Malan](#) under the [Creative Commons Attribution-Noncommercial-Share Alike 3.0 Unported License](#)

Access to Resource: <http://academicearth.org/lectures/malan-security>

Notes: Applicable content begins at 4:36

VI. Sending and receiving email basics

- A. Webmail
- B. Inbox; outbox
- C. Basic security overview
- D. Downloading files
- E. Attachments
- F. Basic professional email etiquette standards.

Topic: Internet Email Accounts

Title: Creating an Internet Email Account

Resource Type: webpage text, graphics, screencapture, video

Copyright: Copyright [Microsoft](#), hyperlink created to copyrighted resources

Access to Resource:

http://snackbox.microsoft.com/layouts/NetworkFileStore/UploadFolder/4c712394-1373-4d8e-b85e-369111823def/37e898aa-3423-492d-b420-c793fa882675/12/Digital_Lit_%20CreatingEmail/default.html?=&mode=Play-Download

Notes: None

Topic: Gmail Getting Started Guide

Title: Getting Started with Gmail

Resource Type: webpage text and images

Copyright: Copyright [Google](#), hyperlink created to copyrighted resources

Access to Resource: <http://mail.google.com/support/bin/static.py?page=guide.cs&guide=1075350>

Notes: 2 minute audio podcast; career services oriented but applicable to general guidelines

Topic: Sending Attachments

Title: How can I send an attachment in email?

Resource Type: webpage text

Copyright: Copyright [Computer Hope](#), hyperlink created to copyrighted resources

Access to Resource: <http://www.computerhope.com/issues/ch000887.htm>

Notes: None

Topic: Email Etiquette

Title: E-mail Etiquette

Resource Type: podcast

Copyright: Licensed by the [Internet Archive](#) under the [Creative Commons Attribution 2.5 Generic License](#)

Access to Resource: <http://www.archive.org/details/CareerServicesE-MailEtiquette>

Notes: 2 minute audio podcast; career services oriented but applicable to general guidelines

Topic: Email Etiquette

Title: Email Etiquette

Resource Type: webpage text

Copyright: Copyright [emailreplies.com](http://www.emailreplies.com), hyperlink created to copyrighted resources

Access to Resource: <http://www.emailreplies.com/>

Notes: 2 minute audio podcast; career services oriented but applicable to general guidelines

VII. Academic computer basics

- A. Course management systems and tools
- B. Academic system course registration and search tools
- C. On-campus print accounts
- D. On-campus help desk.

Topic: Blackboard

Title: Blackboard Tutorials

Resource Type: text and screen capture with voice

Copyright: Copyright [MiraCosta College](http://www.miracosta.edu), hyperlink to copyrighted resources

Access to Resource:

<http://www.miracosta.edu/apps/studenthelp/tutorials/blackboard/index.html>

Notes: None

Topic: SURF

Title: Surf Tutorials

Resource Type: text and screen capture with voice

Copyright: Copyright [MiraCosta College](http://www.miracosta.edu), hyperlink to copyrighted resources

Access to Resource: <http://www.miracosta.edu/apps/studenthelp/tutorials/surf/index.html>

Notes: None

Topic: Student Password

Title: Student Password Information

Resource Type: webpage with text

Copyright: Copyright [MiraCosta College](http://www.miracosta.edu), hyperlink to copyrighted resources

Access to Resource: <http://www.miracosta.edu/apps/studenthelp/studentpasswordinfo.html>

Notes: None

Topic: Student Help Desk

Title: Student Help Desk

Resource Type: webpage with text

Copyright: Copyright [MiraCosta College](http://www.miracosta.edu), hyperlink to copyrighted resources

Access to Resource: <http://www.miracosta.edu/Apps/StudentHelp/>

Notes: None