

Will college courses become a commodity like chickens or pork, beef or computer chips? What are the pressures upon colleges and universities to move in this direction? Are there any countervailing forces that may slow or hinder the drive towards college courses becoming a widely traded commodity? My goal is not to predict the future but rather assess the current situation and examine the forces for and against courses becoming a commodity. It is with some trepidation that I even broach this topic as I may open doors best left closed. Yet I am not the first one to peer into this realm as my talk and the bibliography will show (See handout.). I seek to explicate the prevailing forces working for or against the buying and selling of college courses on a large scale -- that is, college courses as a commodity.

A commodity is an article of trade or commerce most typically an agricultural or mining product that can be processed and resold. A simpler definition for commodity is that it is a product or products bought and sold in commerce. This buying and selling occurs on a large scale normally in large quantities.

Already the movement toward college courses being a commodity has started. One sees this clearly within Eastern Iowa Community College itself. EICC is a part of the Iowa Community College Online Consortium. I, myself, teach U.S. States History in the Consortium and have done so since the start. The ICCOC currently offers 78 courses. While these courses are not bought and sold like pork bellies and so are not true commodities, nevertheless EICC now offers classes taught by instructors from other colleges with their materials and resources. Of course, those other community colleges are using EICC instructors and EICC materials. What this means is that it is no longer important where the class originates. Even before ICCOC, with the ICN, with telecourses and with other distant education examples, the origination of a course became less significant. This ability to move is one of the essential prerequisites for the development of a commodity market. One does not care where the corn is grown, the pork raised, the computer chip manufactured, or the eggs hatched as long as the product fulfills the purpose. The interchangeability of the commodity allows it to be readily resold. This truck load of corn is generally as good as the next. If it comes from a reliable source and has a minimum standard of quality, it can be bought and resold as much as the market will allow. Currently this does not happen with

courses within the Consortium. Still the ICCOC demonstrates that courses can be exchanged. The ICCOC classes are not bought and sold yet but it is obvious that they could be.

What about the instructor, though? ICCOC, ICN, and telecourses all require an instructor. Normally the instructor creates, develops, and delivers the class for the classroom. This seems to be an insurmountable problem for college courses to being a commodity. The instructors provide an essential humanistic and unique flavor to each distinct class setting it apart from every other class. While this is true, when we consider credits we realize that this does not hinder courses from being a commodity. With the transfer of credits, schools all over are acknowledging that classes are interchangeable. My U. S. History class provides the same three credits to a student that they will get at any of the Consortium colleges or the state universities or any number of other colleges and universities when they take a similar U.S. History class. Those credits have become an exchange medium like dollars or euros or rupees or pesos used for the interchange of college courses. Previously college courses, themselves, could not move about as they are fastened to the brick and mortar buildings and the instructors at the location. ICCOC - any online class -- demonstrates that such ties are completely broken. The class can come from anywhere even a cd-rom. Now, I am using ICCOC as an example to demonstrate how classes have become interchangeable and do not deny the valuable services Consortium does provide. Still an EICC student will get the same three credits regardless of whether their ICCOC teacher is located at EICC or at Southwestern Community College or at Iowa Lakes or at whichever community college.

While the Consortium is not actually treating class as a commodity, – yet – they are setting the groundwork. I'm certainly NOT arguing that the ICCOC is alone responsible for contributing to the transition of courses as commodity. After all, Iowa Public Television offers a variety of adult courses that provide credit when offered through a sponsoring institution. Here, again, we have pre-packaged classes that are offered by a variety of state higher educational institutions including EICC. For the IPTV courses all you basically add is the instructor since many of the materials are already prepared. The instructor remains a necessary element in these courses even though the instructor does not provide or arrange the

materials. Notice, though, that now the instructors are interchangeable for these classes and do relatively less preparation work.

With the widespread use and growth in the number of adjunct instructors at this institution and across the United States, the interchangeable nature of instructors has become abundantly apparent to administrators, full-time faculty, and, of course, the adjuncts themselves. An adjunct teaching a class is treated as the equivalent of a full-time faculty member. The student gets the same three credits. It is not the purpose of this talk to debate the appropriateness of using large number of adjuncts. However the reality of large number of adjuncts teaching does directly relate to providing a structure necessary for college courses to be commodities. With adjuncts, even the teaching of a class becomes interchangeable -- making the course even more like a commodity. Before online classes were common, adjuncts when hired put together their own classes, classes that filled the same requirements as those offered by full-time faculty. If a new adjunct is required, one is hired who then comes up with their own version of the class. Adjuncts are replaceable particular in those disciplines where other job opportunities are minimal. By moving towards using adjuncts, colleges and universities have set up – intentionally or not -- the groundwork for the widespread interchangeability of instructors and thus also of college courses. Courses no longer need classrooms or a particular instructor. These are essential first steps in the development of a commodity.

Let me add one additional note on adjuncts. Outsourcing has become a common business practice. Software help desks, basic manufacturing, labor-intensive graphics work, and so on are tasks successfully transferred to overseas workers. It does not take much imagination to realize that adjunct work could also easily and cheaply be moved overseas as well. Just think how much money could be saved if instead of paying adjuncts their "outlandishly high wages", administrators hired adjuncts overseas from the huge numbers of English-speaking graduates of universities in the Philippines, India, and elsewhere. Since the content of the course is on a CD-ROM or online, the adjunct only needs to do some grading and answering questions via discussion boards, online chats, or internet telephone line. EICC has had adjuncts in Virginia, Chicago, and elsewhere for courses already. Why not have them from

India and save still more money? Think of the possibilities of cultural exchange. Hire a graduate student in India to teach U.S. History after 1877 to Iowa students. Do you think I am trying to predict the future here? Think again. Think of the numerous graduate students from overseas who already teach American students in major universities. They could easily teach-- via the internet -- many of those same courses from their native homes if the courses were pre-packaged.

If one looks back historically at pork production, chicken production, or any other commodity, the essential transformation of those products to commodities occurs when they achieve the ability to be interchanged and the necessary transport network is in place for widespread distribution. After that, what is needed are markets, people willing to purchase, these commodities. Since courses can now be interchanged and their widespread distribution is no longer hindered by bricks and mortar or by the need for specific instructors, courses have become a commodity. Yet a commodity must have a market for the buying and selling. Do such markets exist?

Already those markets are emerging. We can see this in that there are businesses selling classes. Among non-credit examples, you have the "Great Courses" catalog from the Teaching Company which sells over 70 courses which are available either by DVD, videotape, audio CD, or audiotape. You can visit their web site at teach12.com, which is listed in the bibliography. According to their marketing materials they select the top 1% of the 500,000 professors in America by sending their recruiters out to canvas the campuses from Harvard to Stanford. Then they audition about 1 in 20 professors and those auditions are reviewed by 100s of their customers. Only a select few have the capabilities to be included in the Great Courses catalog. The company's tag line is "Great Professors, Great Courses, Great Value, Guaranteed" – the "Joy of Lifelong Learning Every Day". A prominent part of the promotional material is that college is wasted on the young – so why not take advantage now of university education? Supporting blurbs for the Teaching Company come from Richard Riley former US Sec. of Education and Orrin Hatch, US Senator from Utah. Frankly, if I had a choice of listening to me talk about U.S. History or to the polished performances of these collegian superstars, I'd pick the superstar.

Obviously these courses lack assessment of the students and no credit is involved. That is not the case, though, with Dallas TeleLearning from the Dallas Community College District. Their advertising brochure states that their courses are "Designed for low faculty maintenance and preparation". In short, these are fully packaged college courses available via broadcast satellite, telecourses, web courses, cd-rom or some combination of these. Dallas TeleLearning states that "Our courses better accommodate non-traditional learning styles by integrating broadcast-quality video programs with interactive online components and print materials from leading international authors and publishers." Each course typically has a content specialist, a project director, a producer, an instructional designer, a research specialist, a production assistant and an executive in charge as well as a two advisory committees, one local and one national. Imagine what you could do with such a support staff when you teach a course. Telelearning's mission statement is to "create and distribute high quality, technology-based distance learning products and services to students and institutions worldwide." Attend any educational conference remotely related to distance education and you are likely to see their booth.

Dallas TeleLearning and the Teaching Company are only the beginning. There is the Monterey Institute for Technology and Education in California that seeks to create a "National Repository of Online Courses" which licenses courses for institutions to use. There is also the League of Innovation in the Community College and its Project SAIL. SAIL stands for Specialty Asynchronous Industry Learning. SAIL seeks to connect colleges with other colleges that are providing courses to purchase. Carnegie Mellon University has created a spin-off for-profit subsidiary called iCarnegie which sells online classes to colleges so they can deliver a wider variety of courses to their students.

The actual selling of college courses is still a small sector of the growing college course commodity market. The dominant force in this market is the textbook publishers. The enforced standardization of courses resulting from common textbooks greatly enables the exchange of courses. The textbook publishers are the "800 lb. Gorilla" pushing towards the commoditization of college courses. Why? Increasingly publishers provide not just the textbook but all kinds of ancillary products to go along with the text. Now we do not simply buy a textbook but we buy the entire course since one gets a time-

dependent web site that provides assessment, additional content, instructor lectures, maps, interactive learning objects, supplemental materials, and on and on. Now publishers provide all the online features themselves including grading programs, bulletin boards, and so on which were previously provided by the course delivery software. Take a look at the web sites for Bedford/St. Martins, Prentice Hall, or McGraw Hill college textbooks and you begin to see how extensive these "companion web sites" have become. Their goal is, of course, to get you to use their textbook and once you do, to enmesh the instructor into their online services to assure continued use of their textbook. With this growing trend from textbook publishers, college courses have become a commodity, a commodity developed out of the use of a college textbook. According to the March 2005 issue of *Campus Technology*, postsecondary US institutions spent nearly 5 billion dollars in 2003 on textbooks with a substantial amount of future growth in digital materials. Publishers are focusing on the "bundling" together of digitally formatted materials to "help" the instructor in their preparations.

At the same time, postsecondary institutions spent an additional 5 billion dollars on software and hardware infrastructure including course delivery software, enterprise software, and hardware. The projected growth will be in custom publishing and course delivery software. Clearly, it is big business for publishers and others to become involved in delivering online content. This is illustrated with Kaplan University which is a profitable division of the *Washington Post* which also runs Concord Law School, the first on-line law school. A publishing empire owns a university and a law school.

This might seem like an unusual circumstance. It is not. According to the April 2005 issue of *Training* magazine, Corporate University Xchange monitors the practices of over 170 different corporate universities. Of these corporate universities, 77 percent have a learning management system, 57 percent use authoring tools, and 55 percent use virtual collaboration tools. It is increasingly common for major corporations like General Mills, Randstad, Ernst and Young, Microsoft, IBM, and others to have a Chief Learning Officer. These 170 corporate universities, on average, spend 19 million dollars on training and that amount increased by 43 percent from 2003 to 2004. Projections show they will continue to grow at a rapid pace. This 19 million is an average for each one of the 170 corporate universities that this survey

examined. The combined total then is 3.2 billion dollars. This does not begin to include the vast amount of money spent on training in businesses and industries that do not use a corporate university.

Corporate universities by themselves do not necessarily produce commodity markets for college courses. Still this same issue of *Training* magazine discusses how corporate universities can "stretch their budgets". In one case study, they discuss how a Canadian credit union, Envision, achieved a 1841 percent return on investment when they built a corporate university. This same Canadian credit union became the first fully-articulated corporate university in Canada. The University of Phoenix reviewed all of its classes for free and two local public universities agreed to grant credit for most of the courses that Envision was offering saving additional money for Envision on academic fees. Envision is not the only example of this. Wieland University, a corporate university in the US, launched itself in 2004. By 2005, they were receiving nearly 720,000 dollars in a federal retraining tax credits. Wieland's corporate university trains its employees in the skills necessary for residential homebuilding and general construction mainly in the American South. Wieland also can provide college credit just like other vocational educational programs at a community college.

It may seem that this has little to do with courses as commodities and rather more to do with direct competition from corporations taking on more training and learning responsibilities for themselves. Still much of the training that these corporate universities use is either built in-house or sub-contracted out. The training creates distinct computer-based learning modules that can be sold and used in a variety of settings. For example, cadets at West Point use a standard business-leadership situation that is transposed to a three-dimensional simulated world. This creates a computer game very similar to the "The Sims". In this simulation, the cadets guide their three-dimensional character, or avatar, through a series of typical staff meetings where students use their authority to delegate responsibilities. The staff reacts in various ways including resenting the leader's authority, being inattentive, and so on. The cadets must learn how to assert their leadership and gain the necessary collaboration to complete the task. This simulation occurs in real time and when combined with additional materials and other interactive modules, cadets learn to be better leaders. SimuLearn, Inc. sells this software, called Virtual Leader.

Johnson & Johnson and United Technologies Corporation use it, too. Research firm Gartner predicts that by 2008 the eLearning business will double to 21 billion dollars worldwide. These materials are likely to cross-pollinate with similar materials in from higher education. These materials can easily be used by colleges in their courses and, indeed, become entire courses unto themselves. Imagine teaching sociology with the Virtual Leader program or with "The Sims" itself.

Colleges have a considerable incentive to begin using these types of reusable computer-based learning modules, simulations, and interactive instructional materials. The primary reason is that they can save money, lots of money. In one case study described in *University Business* magazine, Rensselaer Polytechnic Institute used a 200,000 dollar Pew Trust grant to convert a basic introductory level course into a series of software-based learning modules. After the course was redesigned it was tried out with 3600 students. When asked, half the students preferred the redesigned class and 50 percent preferred the typical lecture class covering the same content. What caught people's attention though was the money saved by using the software-based class. It became much easier to process larger numbers of students through the course and it required less "faculty inputs". At this point, Rensselaer Polytechnic received an 8.8 million dollar grant from the Pew Trust to launch the Program in Course Redesign. By 2002 more than 30 higher education institutions have received 200,000 dollar grants to convert similar introductory courses and to took part in a study done by the Center for Academic Transformation at Rensselaer. This study showed that for every ten classes, the institutions saved 1 million dollars; nine out ten reported improved learning outcomes; and six of ten showed improved completion rates, two showed no improvement and two showed a decline in completion rates.

The results of this Rensselaer study moved the Ohio Learning Network to institute similar grants for its state institutions. Later Wharton School at the University of Pennsylvania received 10 million dollars from an alumnus to build twenty different applications to allow students to simulate markets so that the students could learn more about "finance, negotiations, marketing, and forecasting". Wharton's survey of students showed that 87 percent thought the interactive classes "significantly enhanced or enhanced learning in class" while 79 percent stated they were "more effective than lectures". Wharton

soon negotiated a contract with publisher Pearson Addison Wesley "to package and sell the applications to other higher education institutions around the world." This brings it full circle. Colleges create learning modules that are sold to publishers who in turn resell the courses to other colleges. If it walks like a commodity, talks like a commodity, and behaves like a commodity, it probably is a commodity.

All this is happening in an environment where community colleges, four-year colleges, and universities are operating in an increasingly commercialized atmosphere. The *Chronicle of Higher Education* in recent years has published numerous articles talking about the growing influence of commerce on universities -- a few of which I have listed in the bibliography. It is interesting to glance through the *Chronicle* itself and examine who is advertising in its pages. While publishers remain one of the highest purchasers of advertising in the *Chronicle*, the software industry is a close second if not higher. It would be interesting to see the dollar amount each industry spends in the *Chronicle* over the last decade. There also have been numerous books published in the last few years documenting this transformation.

For example, in *Shakespeare, Einstein, and the Bottom Line: The Marketing of Higher Education*, David Kirp opens his book with a 2002 scandal where Princeton's admission officials hacked into Yale's admissions web site to see profiles of students admitted to Yale. Much of Kirp's book describes the growing competition and marketing of higher education institutions as they seek to attract a growing number of students from a declining population. Kirp describes how Saint Xavier University provides personal trainers for students at the fitness center located near a Krispy Kreme doughnut shop and a Starbucks. University of Cincinnati has a gourmet chef for the dining halls. Page after page of Kirp's book provides anecdotal evidence of the growing influence of marketing.

On a different tack, Jennifer Washburn's *University, Inc.: The Corporate Corruption of American Higher Education* focuses instead on academic research at major universities. Her focus is on the impact of businesses in squelching research that may be a detriment to corporate profits and more university grants. She provides numerous examples of where research and research results were undermined by the commercial and funding interests of the higher education institutions. Richard Ohmann in his *Politics*

of Knowledge, focuses on professions and print culture and how they contribute to the commercialization of the university. Christopher Newfield's *Ivy and Industry* gives a more lengthy history of business-university relations from 1880 to 1980. Discussing the commercialization and marketeering of universities as described by these various books could easily fill several hours. I mention these incidents from these books only to illustrate what is going on in universities and colleges. I am not making the argument that business and higher education should not work together nor that considerable good can come from such relations if appropriately regulated. My point is simply that this commercial atmosphere provides a fundamental context within which college courses can more easily be a commodity.

Four other points need to be made concerning the commercial atmosphere in universities and colleges of today. I have not described the growth of large for-profit universities such as University of Phoenix, Kaplan University, etc. These are distinctly different from the corporate university phenomenon I described earlier. Their focus is their own bottom line not the bottom line of a larger corporate entity. These for-profits clearly thicken the commercial atmosphere but they are rarely involved in the selling of individual courses though they do purchase courses from textbook publishers and others. Their goal is simply making money from the courses they do offer. If purchasing learning modules or courses adds to their bottom line, they will do it.

The second point is the significance of intellectual property rights. I have padded my bibliography with a few unread, titles dealing with this issue in the context of higher education. The key question of who owns a course designed or guided by a faculty member is central to the development of the market for college courses. Derek Bok's book *Universities in the Marketplace*, documents the impact of college athletics but also explores the realm of intellectual property rights and the importance of those to universities and colleges. Intellectual property rights is a huge topic that can not be ignored when dealing with this issue. I will address this more directly in a few moments, but for now, the assertion of property rights by colleges and universities clearly provides a foundation for the buying and selling of college courses.

Next there is the basic reality according to a *Campus Technology* article that about 75% of the students in higher education today are students in a consolidated system. Sometimes the consolidation is similar to that of Eastern Iowa Community College. At other times it is a state-wide consolidation of community colleges, public colleges and universities, and research institutions as we see in Nebraska, Wisconsin, and so on. At other times it is a city or county-wide consolidation like Dallas County Community Colleges or Miami-Dade Community College. While such consolidation might initially appear to reduce the amount of buying and selling of classes since smaller institutions are squeezed out of existence, that is not the case. Historically, industries have tended to consolidate when their product have become a commodity. Smaller businesses are squeezed out by larger producers who have economies of scale and more resources. Think of the airline industry, the auto industry, the phone companies, the cable companies and one sees this trend repeated. Think of the beef, pork, chicken, and computer industries. In the case of education, small, private liberal arts colleges may gradually disappear except for a few nostalgic holdouts. As the consolidation occurs, competition among the larger institutions increases, driving prices down, forcing cost savings while retaining the necessary outcomes. This sounds familiar. This is what prepackaged classes will allow larger institutions of higher education to do. Instead of having dozens of faculty or even dozens of adjuncts teaching Western Civilization or basic electricity or basic biology, one has a simulated instructor explaining the material with outsourced adjuncts used for grading and answering questions. Large lecture halls will be replaced with iPods where the lectures will be piped directly into the students head. This is not futuristic -- it is already occurring as some campuses experiment with iPods. With the coming of video iPods, the students will not need lecture halls since the instructor's lecture will be available 24/7 with the faithful outsourced adjunct standing by for questions. The expense of full-time faculty will be greatly reduced – they can instead do research on subjects where lucrative patents can be obtained. It is not just iPods either. The US military routinely uses interactive materials to train its recruits and is an enormous market for prepackaged courses and learning modules. The Defense Dept. has been pushing for several years a system whereby all kinds of learning modules can function together within a larger learning management

system. This system provides a complete learning program tailored to each soldier, sailor, or air crew member based upon their occupational goals.

Finally, the military has for decades played a large role in commercializing higher education. After all, Eisenhower warned the country of the dangers of the military-industrial complex that makes war readiness a profitable business. He stated in his farewell address to the nation in January 1961 that "the free university, historically the fountainhead of free ideas and scientific discovery, has experienced a revolution in the conduct of research. Partly because of the huge costs involved, a government contract becomes virtually a substitute for intellectual curiosity. For every old blackboard, there are now hundreds of new electronic computers. The prospect of domination of the nation's scholars by Federal employment, project allocations, and the power of money is ever present and is gravely to be regarded." These words seem particularly applicable to our world today and no less true for community colleges.

Before going on let us do a quick review of factors contributing to the college courses becoming a commodity. We have:

1. the creation of packaged online classes that are exchanged or bought and sold.
2. the use of large numbers of adjuncts.
3. the steady growth of businesses and colleges that sell courses and learning modules.
4. the evolution of textbooks into digital courses sold by publishers.
5. the expansion and increased use of corporate universities using packaged educational materials.
6. the saving of money by creating reusable learning materials.
7. the commercialization and marketing of colleges to attract students, athletes, grant money, and research opportunities.
8. the consolidation of institutions of higher education.
9. the use of intellectual property rights to hold onto profitable packaged courses and research results.

These factors taken together seem overwhelming particularly in light of companies already buying and selling courses. It seems inevitable that courses will be more and more a common commodity given the huge potential profits, the possibilities of cost-reductions, and the constant

drumbeat of competition. Yet it was in the very heart of this commercialized higher education that a new movement started that revolutionizes our approach to education and college courses. For as much as these commercializing forces seem inevitable, they do not take into account one Richard M. Stallman. Be patient with me as I explain.

Stallman in the 1980s was part of the hacker community at MIT's artificial intelligence lab. Hacking at that time meant, not destructive intrusions into other people's computers, but rather a seeking of innovation ways to solve hardware and software problems that stymied the use of the computer. Once this hacker community fell apart, Stallman briefly created proprietary software but refused to sign the necessary non-disclosure statements that companies required. Stallman had come to believe that such agreements violated the cooperative spirit of the hacker community who shared results among themselves. For Stallman it was a situation like the collaborative work of a scientist who does research in a particular area not knowing how others may use this research to further advance science. Stallman wanted to create software and then share with anyone how it was made, how it was used, and how to change it.

Stallman believed that the concept of freedom was essential for itself and not just because it improved the software by making it available for others to examine and improve. Stallman began the free software movement in the mid-1980s. "Free" software meant not free as the opposite of "price" or "cost". Instead "free" meant one had the freedom to run the program for any purpose. One also had the freedom to modify the program, to redistribute the program either without cost or for a price, and one had the freedom to distribute modified versions so that everyone could enjoy the improvements you had made. So "free" meant "freedom" and does not refer to price. Indeed, Stallman argued that "there is no contradiction in selling copies of free software". Free software was "Not free in costless, but free as limited in its control by others. Free software is control that is transparent, and open to change, just as free laws, or the laws of a 'free society' are free when they make their control knowable, and open to change." according to Lawrence Lessing. For example, Americans are free because we recognize and can know the laws we are to obey and we can change them. To Stallman and Lessing, free software is

the same – it is open for us to see and for us to change if we wish. Lawrence Lessing, by the way, is professor of law at Stanford Law School.

So in 1984 Stallman quite his job at MIT, gave up completing his Ph.D. and began to work full time on producing an operating system that would be free as in free software. To support the notion of this free software, Stallman in 1985 came up with the notion of a copyleft as opposed to the more familiar copyright that we all confront in our educational lives and elsewhere. What is copyleft? According to the Wikipedia, "Copyleft describes a group of licenses applied to works such as software, documents, and art. Where copyright law is seen by the original proponents of copyleft as a way to restrict the right to make and redistribute copies of a particular work, a copyleft license uses copyright law in order to ensure that every person who receives a copy or derived version of a work, can use, modify, and also redistribute both the work, and any derived versions of the work. Thus, in a non-legal sense, copyleft is the opposite of copyright." This is achieved by a license that stipulates that every owner of a copy of the work can "use it without limitation, distribute it in as many copies as desired, and modify it in any way they see fit" whereas a copyright license allows limited use, no distribution, and no modification. In addition a copyleft license has to "make sure that the owner of the derived work will distribute it under the same type of license" so that it cannot become part of a copyright.

Another way of understanding copyleft is to contrast it with public domain. Items in the public domain may be freely modified since the owner has give up ownership and all rights to the work. However works derived from the public domain materials can be licensed though not the public domain portions. Such licensed derivatives may not be used by the creator of the original. That is public domain with a copyright of a derivative work. Copyleft says that any derivative work must also be open to everyone and can not be copywritten. Various nuances were added to the copyleft license but basically Stallman formulated the foundations of what came to be known as the General Public License that provided licensing protection to ensure software freedom. Stallman, himself, went on to develop a variety of free software programs that helped create a widely available alternative operating system.

This notion directly challenges intellectual property rights. In the book, *The Anarchist in the Library*, the author, Siva Vaidhyanathan, notes that the concept of intellectual property rights is a recent development used only since the 1930s though others say only since the 1960s. The major elements of intellectual property (patents and copyrights) came about during the industrial revolution. Intellectual property has a distinctive feature that separates it from "real" property. This is clearly explained by Siva when he writes, "If someone steals my car, I am left with no car. Yet if someone photocopies my book, I still have my book." The obvious question is then where is the theft when the book is copied? Indeed Stallman argues that copyright law was initially set up to protect authors from having publishers take a book and publish it without the author's participation. Copyright was a protection for the author that restricted publishers so that there was some assurance that the copies made matched what the author originally created and the public could be assured they were obtaining from the publisher what the author intended. In the current digital world, copyright has taken on exactly the opposite role. In the digital world, copies can easily be made by anyone and the duplication is nearly flawless. There is no longer any reason to have the copies made at a central location and shipped. Now copyright is used to let publishers restrict the public from copying in the name of protecting the authors. Again, originally copyright was set up for authors to restrict publishers so that the public got what the author intended. Now copyrights are used to let publishers restrict the public in the name of protecting the author.

Intellectual property rights uses copyrights to allow the creators of the intellectual property to control distribution of their developments to the detriment of the rest of the world. Intellectual property creates an "artificial scarcity" because it is scarce only because it is not allowed out for others to use – there are no photocopies allowed, for example. Intellectual property rights, according to the *Anarchist in the Library*, is like closing and locking the library doors saying that only certain people with a key can enter and gain knowledge. Stallman, Lessing, Vaidhyanathan, and others are arguing that the door must be kept open to all. The *Anarchist in the Library* states "Librarians should be our heroes. The library is not just functionally important to communities all over the world; it embodies the Enlightenment values in the best sense. A library is a temple devoted to the antielitist notion that knowledge should be cheap if

not free—doors should be open. Supporting libraries—monetarily, spiritually, intellectually, and legally—is one of the best things we can do for the life we hope to build for the rest of the century.” The anarchist in the library is each of us since we are given free reign to explore the wealth of knowledge within its walls and use that knowledge freely – just like Stallman said with the free software.

So Grokster and Napster and all those peer-to-peer software programs that used open source software (another term for free software but a term Stallman disparages) to distribute music “illegally” were in essence throwing open the doors of the library. What is happening as the *Anarchist in the Library* explains is that communication of knowledge and information is unregulated in our current digital world. We communicate exponentially easier with each other and transmit copied knowledge to each other on the merest of whims. This is not without its problems – that is another topic though—but it does give a radical response to having college courses a commodity. Instead of a commodity, courses are part of the library and so should be open to everyone. This presents a direct challenge to courses as commodities.

Interestingly enough Stallman’s alma mater, MIT, has the OpenCourseWare a huge library of courses and course materials made available by MIT faculty for the entire world over the internet. Susan Hockfield, President of MIT, explained that “OpenCourseWare expresses in an immediate and far-reaching way MIT’s goal of advancing education around the world. Through MIT’s OpenCourseWare, educators and students everywhere can benefit from the academic activities of our faculty and join a global learning community in which knowledge and ideas are shared openly and freely for the benefit of all.” Over 1500 different courses in all the disciplines are right there for everyone to use including syllabi, course materials, and lecture notes. Copy and use them as you wish according to the “Creative Commons” license which is a variation of the General Public License mentioned above. MIT is a part of an international group of schools, all taking part in the OpenCourseWare idea.

This is not the only effort though. There is also MERLOT, the Multimedia Educational Resource for Learning and Online Teaching, provides learning modules and learning objects that are freely available to those who wish to use them. FATHOM, originally an attempt to create a consortium of

colleges in the New York to deliver credit classes for the usual tuition fees, has now become a source of online courses for free as well. Sofia, the Greek word for wisdom, is also a name for another source of free online courses. There are probably many others as well as the idea of openness rather than control has taken hold. Though, of course, giving learning away is not a new idea. Socrates teaching the Athenian youth reminds us of how old this tradition is – hopefully for open courses, hemlock will be avoided.

The most startling example of this notion though is probably the wikipedia. A wiki is a web page that anyone can edit. A wikipedia is an encyclopedia in which anyone can edit the entries in it. The wikipedia uses free software – so not only can you freely use and edit the encyclopedia itself but you can also freely use the software that the encyclopedia uses. The wikipedia uses a General Public License for documents and its primary restriction is that release any derived work from it under the same license it uses. Here is where the library's doors are wide open and you are invited in to help create the contents of the library. The results are remarkable. Wikipedias are available in at least ten different languages, the English version has nearly ¾ of million articles. Yes, the articles vary in quality but most are sound and some are inspired. It tends to be more focused on the current and is weak in history though as with any encyclopedia any specialist will find it to be shallow. Yet it is the remarkable fruit of a collaboration that knows few borders.

The greatest challenge then to college courses as commodities is freedom --- freedom as in free software, free knowledge, free access. It seems initially to be a rather radical concept, even naive and idealistic. Stallman, in particular, but others as well, have opened this door and the world is peering into it, uncertain of what to do with such freedom and the responsibilities it requires. It humbles us. I do not own the history I teach. You do not own the biology or chemistry or physics you teach. The English language that you impart to your students is not yours by copyright. The concepts of heating and cooling for the HVAC students does not belong to any one instructor. The math, the algebra, the calculus, the trigonometry you help your students to comprehend is not your intellectual property. As the world pushes forward with the increased commercialization of higher education it is appropriate that we

be reminded of this lack of ownership. I understand that copyright has its place and its usefulness but then so, too, does copyleft. As EICC tries to find its way amidst the competition and costs, the technological transformations, and the needs of the students, we face many challenges, not the least of which is helping to maintain the freedoms we as citizens and as learners need.

Bibliography

(See handout.)