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ABSTRACT

This paper was written to assist institutions in understanding the costs associated with providing online courses. An accompanying Web site was created to allow users to enter data specific to their institution in order to estimate costs associated with a venture into online courses. The paper addresses: (1) background of online courses (definitions and why they are important); (2) costs involved in developing and teaching online courses (determining categories for costs, technology-specific costs, support personnel costs, faculty development costs, hidden costs, development costs, teaching costs, sample of Marshall University's costs); (3) revenue for online courses; (4) what is important for this type of education to be successful; (5) the interactive Web site; and (6) results from surveys on developing, teaching, and taking online courses. Appendices contain survey materials. (Contains 28 references.) (EV)

Running Head: DETERMINING THE COSTS OF ONLINE COURSES

Is Distance Learning Worth It? Helping to Determine the Costs of Online Courses

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Abstract

Before an institution of higher education ventures into online education, a complete understanding of costs to be encountered is essential. Although dozens of methods for delivering courses through distance education have been utilized for years, the offering of online courses through the World Wide Web has existed for less than a decade. Many institutions at this time may not understand the full impact of the costs of online education. This paper will assist institutions in realizing these costs, whether they are tangible or perceived. The paper and accompanying web site (<http://webpages.marshall.edu/~morgan16/onlinecosts/>) will discuss what areas must be considered, what effects online courses may have on an institution, what costs are involved in the establishment of this type of venture, and also examine costs and possible problems that may be encountered with ongoing course offerings.

The need for this research became evident to as early as 1998 when trying to research what online courses were costing our University. Marshall University's School for Extended Education provided a simple spreadsheet showing how much the University had paid for the development and teaching of online courses, and stated that these were the costs of Marshall University's online course endeavors. The first thing that entered my mind was the question "what about my time and effort spent? Who accounts for that?" This sparked interest to look back at what the University had done and thought about the finances involved. It was decided that it would be beneficial to see if the investment has been rewarded. In short, was it all worth it?

Nine months ago, there was extreme excitement about the possible outcomes of this project. Nine months later, there is even greater excitement about the results, and a hope that the information provided herein will be beneficial to those considering implementing online courses. Since there have not been many books published on the costs of online education, research focus was through a literature search of magazine articles, an analysis of gathered surveys, and personal experience. Although this paper represents the findings of said research, a continued search for answers in this area with the use of the accompanying web site (<http://webpages.marshall.edu/~morgan16/onlinecosts/>) is necessary.

Since this is such a gray area in higher education, there are hopes that this information will provide other institutions as to what they need to be aware of before deciding to initiate these types of offerings. After compiling research and survey results, it was evident there were many things found that had not been considered beforehand. It was fascinating to find a high percentage of faculty who were interested in teaching online, but only if administration were to make changes in such a manner they would be recognized for their efforts. Students at our Marshall University have been very pleased with their experiences in online courses to date, something we had no evidence to support until this point.

Some of the greatest concerns in the area of online courses have been retention and equality of content being offered. It was gratifying to find that retention rates in online courses at many institutions, including Marshall University, are in the 70% range and accrediting agencies are accepting online courses as an acceptable form of delivery. Another positive experience that resulted from this project was the accompanying web site (<http://webpages.marshall.edu/~morgan16/onlinecosts/>) that allows individuals to enter data specific to their institution in order to estimate costs associated with a venture into online courses. This site was developed from research data gathered over the past nine months. By attempting to account for all costs involved, the site should provide an institution with a true overview of the costs in introducing and maintaining online courses.

Online education has rapidly developed into such a hot topic that it has become the center of conversation at many higher education institutions. An institution either has plunged into it headfirst, or is seriously pursuing interest. What more often than not happens is that higher education institutions begin offering online courses without realizing what they will cost 1) to get started and 2) in the long run. Carlson (1999) insists that to be successful, institutions must properly plan, convert material, and evaluate their distance education offerings. Nonetheless, some institutions will never possess the resources to be able to conduct this endeavor themselves without possibly a partnership. Online education may not even be the approach that some wish to take.

Because there has not been much information available regarding how an institution should get started and what the cost might be, this project is a great opportunity for additional research and

development of a web site where an individual could answer questions regarding their institution to determine if online courses will be beneficial or too costly for investment. Some institutions forced into online education have closed shop, usually because they were without a well-thought out financial plan. Still others have prospered.

This paper will provide insight as to what one should be aware of before venturing into the realm of online education. The research results should also provide a means to see if the financial investment of online education will be beneficial. It is easy to say that no two institutions are the same and, because of this, the web site at <http://webpages.marshall.edu/~morgan16/onlinecosts/> allows the changing of variables that reflect the affects on the outcomes of the costs. Once users of the site have made their own entries and comparisons, updates will be made to reflect changes suggested by those users.

The web site was tested with findings from Marshall University's cost analysis regarding online courses and found to be very accurate. The numbers were not identical, but the ratio of the institution's cost to revenue between the site and the paper were within five percent. Additional comparisons at other institutions will greatly solidify the site as an invaluable tool. Continued updates and maintenance of this site will be a personal goal.

The Institute of Higher Education released a report on March 21, 2000 (Quality on the Line) regarding guidelines for online courses. Throughout this paper, at some point 23 of the 24 principles that Fleischauer (2000) named as critical elements to have in place before venturing online were mentioned. The only one missed was that adequate library resources needed to be supplied to online students.

Is Distance Learning Worth It? Helping to Determine the Costs of Online Courses

Background of Online Courses

Definition of an Online Course

Webopedia defines distance learning as “a type of education where students work on their own at home or at the office and communicate with faculty and other students via electronic mail, the World Wide Web, electronic forums, videoconferencing and other forms of computer-based communication” (Webopedia, 2000). The concentration of this paper is on just one of dozens of types of distance education. For this reason it is very important to define clearly what type of distance education this paper covers. These courses require no physical attendance on a college campus or affiliated center to receive parts of course materials. The requirements are not so restrictive to imply that a course would not be considered an online course if it contains traditional students. Many online courses contain full-time students that are unable to take the class during a scheduled, traditional offering, but found the online version to their liking. The requirement for being an online course holds true as long as there is no attendance requirement for lecture, lab, or any other course function that others at a distance would not have the opportunity to attend.

Why this Type of Education Is Important

The popularity of online courses has blossomed over the past three to four years. Many believe these courses are beneficial offerings for colleges and universities. According to a 1999 study by the National Center for Education Statistics (NCES), nearly 1/3 of all 2-year and 4-year postsecondary institutions offered some form of distance education in 1997-98, and an additional twenty percent, plan to offer distance education within three years. It is amusing to see that 78 percent of 4-year and 62 percent of 2-year public institutions offered distance education, compared to 19 percent of 4-year and 5 percent of 2-year private institutions (Boettcher, 2000). One possible reason for this is the sheer cost of such an endeavor and the limited resources of private institutions. Everyone in higher education knows that funding is becoming restrictive. This, coupled with many colleges and universities seeing shrinking

enrollment, has spurred the search for alternative ways to reduce teaching costs or draw students. Inglis (1999) believes one way to do this is to offer online courses to reach the largest possible market. Although this represents valid reasons why an institution of higher education would want to offer online courses, others may find that there are other compelling reasons for doing so.

By offering material online, faculty can hope to extend participation to those who would not otherwise participate due to large class sizes or a student's shyness. Often times, in a large lecture or course offered via other distance education methods, students are scared or discouraged from participating because of the course's style. Online courses give each student an equal opportunity to participate. Reports claim that students feel more comfortable asking questions in non face-to-face situations with an instructor or peers. Because of the open environment on the Internet, this may lead to a better understanding of material.

Faculty hope that online courses will assist them by helping to increase the quality of their course. Online courses can help provide alternative methods to how material is presented in a traditional setting by taking advantage of multimedia and breakthrough Internet technologies. Inglis (1999) believes that because online courses can use such technologies more effectively than other forms of distance education, they meet the needs of a wider variety of subjects and students. This depends on the ability of the faculty member to match technologies to the learning styles of students.

With the opportunities of online courses, an institution can hope to open new markets and/or partnerships, and quite possibly, decrease overall costs of teaching. Many of the costs of investment to participate in this type of education may not be beneficial to all institutions. The accompanying web site will allow a person to explore these costs and experiment with numbers governing potential offerings and students to see if this type of venture is worthwhile. Inglis (1999) notes that by increasing student intake, one could achieve a greater economy of scale and reduce the overall costs per student. Zanville (1996) found that replicating courses over multiple campuses or using the same modules over multiple courses can help increase those economies of scale, allowing an institution's investment in faculty time to be

multiplied because of flexibility. Zanville also believes that online courses help to enable instructors to reallocate time to deal with students on an individual basis and at convenient times (Zanville, 1996).

Another benefit of online course is in the area of instructional throughput. When effectively deployed, online courses help to reduce the time and volume of instructional activity necessary for students to complete a course. Everyone has met students who can effectively show mastery of the content of a course at its outset, but are forced to progress with others because the course is required. Online courses can help students test out of content already mastered, complete coursework sooner than they would with traditional courses, or help to circumvent course availability problems (Zanville, 1996).

Students of higher education will be the largest benefactors of online courses. Students will often be able to save money on travel and lodging while obtaining a degree. Most importantly, students will not have to give up their earnings potential. Downes (1998) states that students will be able to continue working while learning, allowing them to continue their careers while obtaining college credit.

Costs Involved in Developing and Teaching Online Courses

There are some real difficulties in attempting to determine the costs of an uncertain endeavor. Bates attempts to answer the administrative question “why can’t we just compare the costs for online education to the traditional courses offered at our University?” (Bates, 2000). If it were only that easy. It would have made this writing much easier. Bates (2000) shows that there are incredible differences between costs for traditional courses as opposed to technology-based teaching. Everyone has seen that the investment in technology is very necessary, but also very expensive. Often, the true cost of traditional education is hidden because the costs of developing courses is not tracked or budgeted. Instructors are expected to prepare their material. The main difference lies in the fact that educational technology equipment and support costs are often under budgeted because their importance is not understood or because such costs conflict with other priorities. To truly get an idea of what it will cost an institution, a comparison of the costs of different modes of delivery into a quantifiable number is necessary. Inglis (1999) shows that the easiest way to do this is to determine the average cost per student. Use the accompanying site (<http://webpages.marshall.edu/~morgan16/onlinecosts/>) to estimate the cost for online courses and then compare the results to traditional courses, or other forms of distance education at an institution.

Determining Categories for Costs

Bates states that to find the underlying cause of costs, they must first be broken into distinctive categories. Cost factors that are being investigated include: capital and recurrent costs, production and delivery costs, and fixed and variable costs. Capital costs are costs for infrastructure, equipment and materials necessary for the offering of courses. Recurrent costs are costs that occur on an ongoing basis, such as information technology support. Production costs are costs incurred during the development of the courses while delivery costs are costs associated with teaching a course. Fixed costs are costs that do not change as the number of students change while variable costs change with the number of students

enrolled (Bartolic-Zlomislic & Bates, 1999). For technology-based education, one can see that fixed costs are high, but variable costs are low in comparison to traditional courses.

After breaking down the categories, the task was to assign specific areas to categories. The areas that are of utmost importance are technology specific costs, support personnel costs, faculty development costs, administrative costs, hidden costs, costs of developing courses, and costs for teaching courses. An explanation of each of these areas follows. The web site located at <http://webpages.marshall.edu/~morgan16/onlinecosts/> shows a break down for the estimated costs for an institution.

Technology Specific Costs

One of the largest cost hurdles in deciding to offer online courses is technology infrastructure. An institution must commit to building a proper information technology infrastructure to support online courses before offering the first course. What often happens is that costs are shifted when looking to invest in online courses either through other uses or through neglect. The most often ignored cost is bandwidth charges. Inglis (1999) shows that if an institution tries to require students to bear communication and computing costs as a way of reducing costs, this only shifts costs and does not reflect a savings. To find the underlying cause of what online courses will cost, all costs must be analyzed completely.

One of the worst things an institution can do is invest in technology thinking that it will immediately reduce other teaching costs. Technology usually adds to an institution's costs because of the support and time required to implement. Upon the realization of the expense and willingness to invest, one can hope to improve the quality of learning by making use of the interactive capabilities of newer web technologies. Cost implications come into play when looking at the time involved with accomplishing this goal. Inglis (1999) points out that it may take up to 100 hours of development time to create one hour of student material. The delivery of audio and video requires more bandwidth than simple text or most graphics, which relates to higher costs.

In terms of technology needs, an institution must explore the acquisition of a powerful server to house their online courses. Often, an institution will purchase packaged software to serve online courses. When purchasing a server, it should be configured so that it is compatible with this online course delivery software and provide room for future growth. For costing purposes, you should amortize the cost of a server over a three-year period (lifespan of many computer systems) and assume that an investment of 10% of the cost of the machine each year for new equipment will be necessary.

If growth is planned, it is highly recommended that an institution invest in an online course delivery tool. Most software packages offer pre-built tools so faculty do not have to perform in-depth programming to offer conferencing tools, online tests, secured environments, etc. It is very important that the cost of this software be included in estimations. Traditional courses may use this type of software as well for enhanced offerings to their courses. Remembering that costs should be accounted for completely, the cost of software should be split to reflect costs for online courses and traditional courses.

Support Personnel Costs

Because of the uniqueness of this type of education, institutions will likely benefit from the hiring or assignment of an individual whose function is to manage online courses. This person could be seen as a business manager, one who would be in charge of the administrative side of the operation, but not have academic administration of the courses. Turoff (1997) suggests that all academic decisions be made on the same basis as they are for traditional courses. Typical duties of the business manager would be to assist students and faculty in getting started with online courses; if compensation is rewarded, completing paperwork necessary for compensation of faculty for development or teaching; conduct evaluations about the technology being used for online courses to assure that students and faculty understand what is taking place; generate administrative reports regarding registrations, retention, satisfaction, etc.; distribute any necessary student materials; and coordinate between faculty working with online courses and support personnel on what problems are present.

In addition to the business manager, technology support individuals are key for the success of online courses. Faculty need to be provided with instructional technology and design support while developing their courses, as well as key technical support while the courses are being taught. Furthermore, students will undoubtedly make technical support calls due to a lack of understanding of the technology or the course material. Whatever they may call about, Turoff (1997) states that proper support should be provided to them to ensure they receive proper answers. Even though many of these positions may already exist at an institution, the costs for the portion of their time spent with online courses needs to be accounted for to properly cost out the endeavor.

Faculty Development Costs

Without the provision for faculty development with distance learning, the venture will undoubtedly fail. Faculty development needs not only to revolve around how to use the technology tools themselves, but also provide an understanding regarding how to teach using technology. This type of education often takes a total retooling of faculty to teach online. Turoff (1997) believes that it is often wise to select faculty who are thought to be able to adapt to the use of the underlying technology and to the facilitation, guidance, and leadership of online courses. When a course fails, it is often because either an instructor was forced into teaching the course and was not able to adapt to the role, or that proper development was not provided. One intriguing question that many ask is how does one attract faculty to the developmental sessions? Alternatively, how does an instructor become trained to teach in this environment? One school in Southern Nevada took the approach of paying faculty at a rate of \$20 per hour for attending training during the summer when they have no contractual obligation. Analysis of results received from the faculty development survey, show that it is because of such incentives that they are able to attend development sessions and offer well-thought out and well-prepared courses.

Hidden Costs

What many schools neglect to consider when performing cost estimates are those costs that are deemed hidden costs. How does one value office space in trying to determine the cost of online courses?

Many overlook this area because instructors would have an office space regardless of the type of course they are teaching. This is an important factor in considering costs. One must be aware that not all hidden costs will actually be tangible costs. As John Morrison noted (personal communication, December 5, 1998), one of the costs that can fit into this area would be the increase in network traffic because of online course material.

One of the most difficult tasks in trying to establish costs for distance learning is the determination of how to assign different costs. When trying to determine categories, many costs are forgotten. For example, we mentioned office space above, but Bates points out that there should be a provision for a computer system for the faculty member developing and teaching the courses, telephone services, heating and lighting, central finance office, president's office, and a host of other services, including registration, human resources, and so on. He recommends that there are three ways to account for such costs, often deemed as overheads (Bates, 2000):

- not to charge users
- to average overhead costs out over each operational functions using the service
- spread the costs over all operational units whether they use the service or not

How you decide to account for the costs are up to you but if you truly want to know the true cost of investing in technology, all costs need to be accounted for (Bates, 2000). Other overhead considerations include website construction and maintenance costs. The extent of these expenditures is sometimes hidden by policy or internal departmental costs and is often believed to be negligible.

Many areas must be considered when costing online courses. Institutions may be easily deterred from even considering the endeavor because of the investment. Turoff (1997) shows that costing efforts are used, but can be startling if an effort is as much as 20% in the wrong direction. What is important to take into consideration is that even though the costs seem to be lofty in the beginning, Inglis (1999) argues that long-term costs are likely to be lower than other types of distance education.

Another hidden cost that must be considered is evaluation. Even though evaluation may be the responsibility of the business manager, there is much more to evaluation than determining the cost for the

person administering the evaluation. After administering, evaluations must be tabulated and evaluated if they are to have meaning for future course offerings. In traditional courses, instructors can gain valuable feedback from students just by watching how they react in class. In the online environment, often the only method of feedback is through an evaluation process. Kibby (1999) shows that this can be accomplished through constant feedback with e-mail, web forms, or a course evaluation at the end of the course.

Costs of Developing Online Courses

This section will assist in viewing costs directly related to the development of online courses. By now, one understands that a large investment in technology and its associated training is essential for online courses to succeed. After investment and training, it is time to develop the courses. Development of courses cannot happen overnight. Additionally, there is not a set formula for how long it takes to develop an online course.

Several factors make it difficult to place a simple formula on determining the amount of time necessary to develop online courses. Patti Shank (personal communication, January 13, 2000) and Maggie McVay (personal communication, December 8, 1999) noted that some of the most influential factors in causing for varying development times include: resources available to the developer, technical abilities, pedagogical knowledge, availability of content, form of content (electronic or not), availability of developers and faculty, complexity of course, objectives and desired outcomes of course, type of instructional strategies necessary, and programming needed. Instructional designers should be assigned to a developer. McVay pointed out that at one location, 120 hours are budgeted for the faculty developer, 120 hours for the instructional designer, and 40-60 hours for the web coding, totaling nearly 300 hours. What happens when this course makes use of complex multimedia material? What happens to the amount of time necessary to build the course? It most likely will increase dramatically. Who is to say that all courses will take 300 hours to develop?

For these reasons, the pricing of course development based on the number of hours to develop a course should not be considered. There are just too many unknown variables. Since the development of online courses is such a complex activity, some type of compensation structure should be in place for those who wish to develop. Methods for compensation include a flat stipend for development, release time for the developer, or contractual development. Still, many institutions are having faculty develop a course as part of their regular pay. All one has to do is review the results received from the developmental survey to see what developers have to say about this type of compensation method. Without a proper reward structure, faculty cannot see continuing to develop courses because of the complexity and time required.

Individuals are often worried about what it is going to cost to invest in the development of online courses. You must take into consideration that some, notably the capital equipment costs and the development costs of the course materials, are part of an investment that will be used over the life of a course. Other costs are expenses that will be incurred only once. Still others, and an incredibly smaller amount, are those that will occur yearly (Rumble, 1989). The accompanying web site helps to break down these figures and types of costs.

Costs of Teaching Online Courses

Many instructors fear that once an online course is developed, because of the investment in technology, they will not need to be kept around to teach the course. This is one reason instructors do not wish to participate in the development of distance learning courses. Administrators need to stress that since computers are not smart enough to anticipate all questions, misunderstandings, and more importantly, original and creative outputs of students, faculty are needed to teach online courses.

As there is a need to study the costs of developing online courses, we must consider how instructors will be compensated for teaching as well. Downes (1998) argues that empirical data exists showing that online courses are more labor intensive than traditional classroom courses because of the use of technology. Online students interact to a greater degree than students in traditional courses. If an

online course has not been developed properly, each student will expect more detailed and individualized comments causing instructors to spend larger amounts of time per student (Downes, 1998). Bates (2000) points out that courses need to be developed so that instructors can spend less time per student moderating discussion forums compared with the total time spent in classroom teaching.

Since many online courses require additional time of the instructor, one of the biggest questions on everyone's lips is "what is the number of students at which technology-based teaching becomes more cost-effective than face-to-face teaching?" Unfortunately, as Bates (2000) and others have noted, the answer is no one knows. Just as the case for the time it takes to develop a course, there is not a formula for determining the maximum number of students an online instructor can effectively manage.

Bates (2000) does note that proper student-teacher ratio is as much determined by educational philosophy, course design, and student numbers as by technology. For example, a course which offers didactic information will have little need for teacher-student interaction. This type of course is one that may have high development or fixed costs and low variable costs. Didactic courses could enroll a higher number of students. Other courses may have a high student-student and student-teacher interaction rate because of the way the course's content is delivered (Bates, 2000). This type of course could have lower development or fixed costs and high variable costs with fewer students enrolled.

There are several methods by which faculty can be compensated for teaching online courses. Methods include a flat stipend per course, stipend per student enrolled, or simply as part of the faculty's regular pay. At Marshall University, nearly all instructors of online courses are paid a stipend per student enrolled, but these courses are taught as overloads. Administrators need to be aware of how instructors will be compensated and how many students each course will enroll, particularly because instructors often have to spend more time with an online course than the same course in a traditional setting.

Sample of Marshall University's Costs

There are two reasons that a study of what it has cost Marshall University to offer online courses over the past two and a half years was done. One was to provide readers with a real life example of what

an institution has invested in its technology to take part in such an endeavor. The other was, when combined with the data received from the surveys, to aid in the development of the accompanying web site. Marshall University is an institution of nearly 16,000 students (12,000 undergraduate and 4,000 graduate) in West Virginia. Because of the rural environment and the decline in the number of students attending college in the state, offering online courses to boost enrollment seemed ideal. Former Marshall University President Dr. J. Wade Gilley made a commitment in 1996 to this effort, providing money for support and for compensation of faculty for developing and teaching these courses. Tables 1 through 5 and Figure 1 represents Marshall University's investment in online courses from 1997-1999.

Table 1: Costs of Developing Online Courses

Stipends for Development	60 courses at \$1000 per credit hour	\$148,500.00
Hidden Costs		
Supplies Consumed	\$150/course developed (estimate)	\$9000.00
Administrative Approval Time ¹		\$14,400.00
Faculty Development		
Training ²	10 hours IT Training per course	\$13,320.00
Software/Hardware Costs	Faculty Development Labs	\$33,600.00
Support Personnel in Lab		\$19,110.00
Instructional Technology Support ²	42 hours per course developed	\$55,944.00
Library/Electronic Reserves Support ³	13 hours per course developed	\$7456.80
TOTAL COSTS FOR DEVELOPMENT		\$301,330.80

Table 2: Costs of Teaching Online Courses

Stipends Paid for Teaching - Marshall pays a stipend per student enrolled in a course		
Fall 1997	76 enrollments	\$4977.40
Spring 1998	204 enrollments	\$14,689.40
Summer 1998 (4 sessions)	206 enrollments	\$14,507.30
Fall 1998	390 enrollments	\$31,139.10
Spring 1999	345 enrollments	\$29,985.80
Summer 1999 (4 sessions)	174 enrollments	\$11,836.50
Fall 1999	333 enrollments	\$35,023.90
Hidden Costs		
Office Space ⁴		\$24,153.60
University Administration ⁵	1652 enrollments	\$31,784.48
Help Desk Support ⁶	189 Offerings	\$27,471.15
TOTAL COSTS FOR TEACHING		\$225,568.63

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Table 3: Technology and Infrastructure Costs

Course Server	Purchased in 1999	\$11,600
Backup Materials and Costs		\$1500.00
Server Maintenance and Support ⁷		\$15,575.00
Communication Charges ⁸		
Fall 1997		\$44.80
Spring 1998		\$161.28
Summer 1998 (4 sessions)		\$176.38
Fall 1998		\$277.76
Spring 1999		\$250.88
Summer 1999 (4 sessions)		\$76.80
Fall 1999		\$259.84
Software Costs	\$3000/year – 1997-1999	\$9000.00
Evaluation Software Costs		\$1250.00
Electronic Course Administrator Salary ⁹	2 years on staff	\$59,160.00
TOTAL TECHNOLOGY AND INFRASTRUCTURE COSTS		\$99,332.74

Table 4: Revenue from Online Courses (Tuition)

Fall 1997	\$93 per credit hour – 228 credits	\$21,204.00
Spring 1998	\$93 per credit hour – 569 credits	\$52,917.00
Summer 1998 (4 sessions)	\$93 per credit hour – 524 credits	\$48,732.00
Fall 1998	\$98 per credit hour – 1056 credits	\$103,488.00
Spring 1999	\$98 per credit hour – 936 credits	\$91,728.00
Summer 1999 (4 sessions)	\$98 per credit hour – 420 credits	\$41,160.00
Fall 1999	\$102 per credit hour – 956 credits	\$97,512.00
TOTAL REVENUES		\$456,741.00

Table 5: Summary of Costs and Revenues

Total Costs for Developing 60 online courses	\$301,330.80
Total Costs for 189 online course offerings	\$225,568.63
Total Technology and Infrastructure Costs	\$99,332.74
Total Costs	\$626,232.17
Average costs per student enrolled	\$379.08
Total Revenues	\$456,741.00
Average revenue per student enrolled	\$275.81
Total Cost to the University to Date	(\$169,491.17)

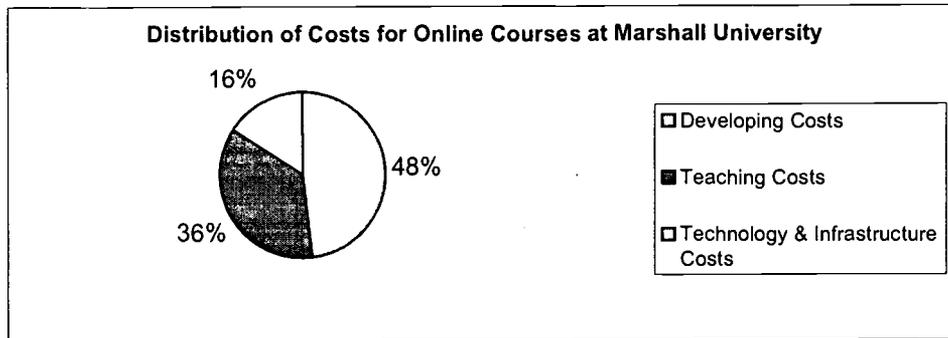


Figure 1: Distribution of Costs for Online Courses at Marshall University

Explanation of Costs

Without an explanation of the costs aforementioned, one could easily be misled. The information here explains the cost categories in tables 1 through 5 that have accompanying superscript numerals.

¹ – Marshall University has a committee comprised of faculty from each college that must approve an online course before it is offered. This committee’s time and departmental chair’s time in approving the course, as well as time for paperwork, is assumed at eight hours per course at a rate of \$30 per hour.

² – Rates for instructional technology support are based on an average instructional technology salary of \$33,000 plus benefits, \$1000 for supplies, with an average of 1950 normalized hours per year. This equates to a rate of \$22.20 per hour. Based on results from an internal survey of instructional technology support individuals, it was concluded that on average, 42 hours are spent supporting each online course developed.

³ - Rates for library/electronic reserve support are based on an average salary of \$15,000 plus benefits, \$225 for supplies, with an average of 1950 normalized hours per year. This equates to a rate of \$9.56 per hour. Based on results from an internal survey of instructional technology support individuals, it was concluded that on average, 13 hours are spent supporting each online course developed.

⁴ – To calculate office space costs, a \$17 per square foot rate per year and 64 square feet per office was assumed for all faculty offices. To calculate the cost of office space for online courses, this figure was taken at 1/5 of its rate because we assume that 80% of the time, office space is used for traditional courses. The figure in Table 3 is calculated based on 111 course offerings over the spring and fall semesters of 1998 and 1999.

⁵ - Administrative costs are calculated at a rate of \$19.24 per student enrolled. These costs include those incurred from the offices of the registrar, bursar, financial aid, admissions, and other administrative areas. This figure is based on the rate established at the University of British Columbia.

⁶ – Rates for help desk support are based on an average salary of \$16,398 plus benefits, \$195 for supplies, with an average of 1950 normalized hours per year. This equates to a rate of \$9.69 per hour. Based on results from an internal survey of instructional technology support individuals, it was concluded that on average, 15 hours are spent supporting each online course taught.

⁷ – Marshall University has taken advantage of using one of its existing staff members to take care of its online course server for the past two years. This person estimates that this task has consumed 12.5% of his time during this period.

⁸ – Data communication charges are one of the hardest charges to calculate. For Marshall's courses, costs are figured using two T-1 lines for data transmission at \$800 per month. It is assumed that each online course occupies .16% of the University's network data traffic per month.

⁹ – The Online Course Administrator's line is calculated based on a \$22,000 salary plus benefits and \$1640 in supplies per year. This position has been in place since 1998.

Inglis (1999) analyzes one study that suggests a minimum 3000 enrollments per year are required to repay the investment on infrastructure. Why such a high number? It is because as the number of enrollments increase, the rate at which the cost per student drops significantly decreases. In Marshall University's case, averaging 826 students per year (2345 credit hours) over the past two years has nearly

paid for Marshall's investment in online courses. The reason Tables 2-6 show such a large deficit is because an additional 18 courses that have not been offered have been funded for development but are included in the costs. Taking away the mere development costs of these 18 courses results in a decrease of \$84,043.26. This shows an \$84,800 loss in investment over 2.5 years. An average of 968 enrollments per year would have been an acceptable number to repay the investment at Marshall University (see Figure 2). From 2000 forward, Marshall would need to average 968 enrollments (or 2904 credit hours) per year, assuming a new server is purchased every three years, courses continue to be developed or modified every three years, and tuition continues to be raised approximately \$5 per credit hour over the three-year period. At the same time, compensation rates could increase by the same percentage. To make up the current loss in investment, an enrollment in 627 additional credit hours would be necessary. These numbers do not take into account the number of traditional enrollments that Marshall may have lost due to the availability of these courses. With these tables, the University can now look at the areas where they could make substitutions to see what number of enrollments would be needed for online courses to be cost effective.

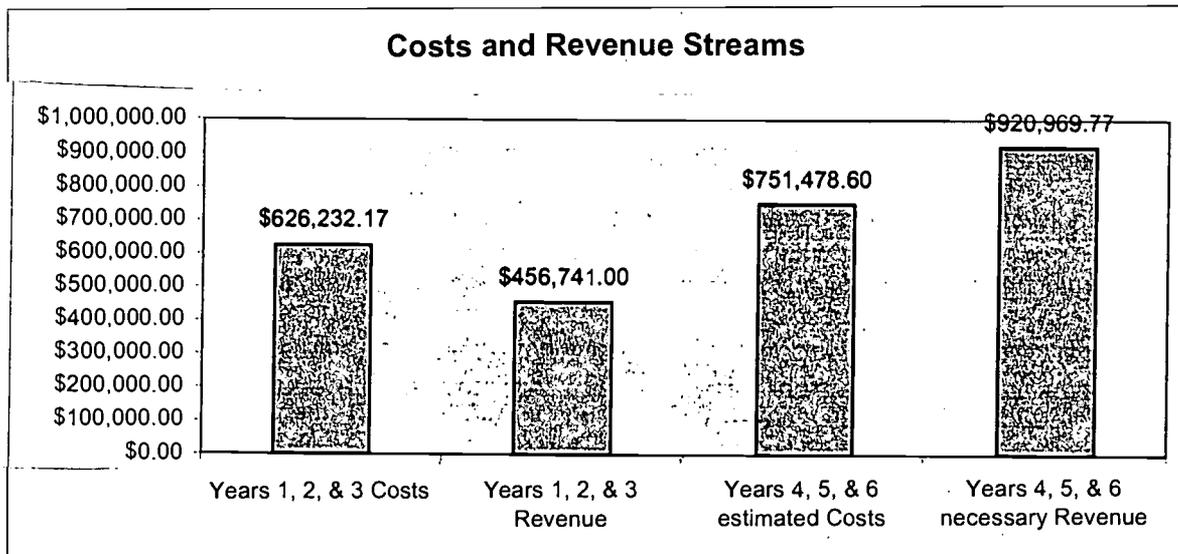


Figure 2: Costs and Revenue Streams for Online Courses at Marshall University

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Revenue for Online Courses

Sources of Revenue

Determining revenue for online courses is actually the easiest part of the entire process. Revenue is generated from student tuition for online courses. One other source of revenue is from a technology fee, which some institutions apply to online courses. When determining what it will cost for an endeavor into online courses, you must consider this when performing costing. Will you report the revenue to your general teaching funds? Will you create separate funds? It is difficult when faculty are not compensated for this type of teaching, but becomes easy when you are paying them stipends to teach. You can compare the amount paid for teaching to the amount received from tuition and technology fees.

A prevalent area of debate for revenue is the determination of what to charge for tuition in online courses. If too much is assessed for tuition or fees, students will not enroll in these courses because of competition from other sources of education. Since the courses are online, your competition is no longer the institution 20 miles away, but the world. Nonetheless, charging too little for tuition will result in a loss of a tremendous amount of money. The approach that many institutions are taking, including 43 graduate schools surveyed by Stevens' WebZine, is to charge the same for online courses that they do for traditional courses (Stevens Institute of Technology, 1999). Of the 43 schools, all but 8 programs charge the same amount. In those eight programs, schools charged more for their online courses than their traditional tuition rates. The NCES study (1999) showed that nearly 77% of schools surveyed charged the same rates for distance education as they did for traditional courses. Marshall University adopted a policy that it would charge in-state tuition rates for online courses. Students are able to take courses for the cheapest rates, without the institution having to lower prices below normal tuition costs.

Why an Institution Would or Would Not Want to Do This

Many argue that some type of online presence will be mandatory for institutions in the near future to stay in the market. Even though institutions may not save money by offering these courses, because of direct competition and possible decline in student enrollment, they will need to. Downes (1998) agrees

that it may cost more in the end if they choose not to offer the courses. Students are going to begin to look for courses they may take while at home, managing a family or job, and at their own pace. With additional courses placed online at equal or less cost than traditional courses, students will not always look at the benefits of attending a college campus. They will take classes most beneficial and convenient for them. Results of the Economics of Online Learning survey done at the University of Alberta (Downes, 1998) indicate that there will be a significant drift in attendance from classroom based course offerings to online courses within the next 10 years. This means institutions that do not offer online learning risk losing students.

Individuals in higher education continue to argue that traditional teaching methods are the best form of learning. There are surveys that continue to reinforce this concept. One report however, known as "No Significant Difference," argues that there is no difference in what is learned in the different mediums (Russell, 1999). You can visit <http://cuda.teleeducation.nb.ca/significantdifference/> to learn more about the No Significant Difference studies. As online courses improve, it will become hard to argue that traditional courses may be the best method for learning. As Downes (1998) indicates, we will continue to see savings for students improve, making traditional courses appear less appealing.

Because of studies such as "No Significant Difference," institutional competition, and the availability of online courses, Mottl (2000) projects classroom use for course delivery to drop dramatically from 77% to 51% by 2003. Mottl also projects the growth of technology delivered courses to increase from 17% in 1997 to 46% by 2003. Will higher education courses follow suit? All one has to do is look to the state system of Georgia with its 50,000 student seats in WebCT to think seriously about this.

Students in higher education could be the most beneficial participants of online courses. More often than not, students will take less time to complete an online course than to cover the same material in a traditional class. This is because a student can move quickly through work they have mastered online whereas, in a traditional course, must proceed at the pace of the instructor. Morrison (personal communication, December 5, 1998) points out that only a few accreditation bodies are concerned with

how a course is delivered, rather than with the content of a course. Marshall University's policy on this is that an online course's content must match the content offered in the traditional setting. Turoff (1997) believes that online courses will begin to draw those individuals who are over committed to attend traditional courses.

Even though much of the information has been positive, research has helped to identify reasons that an institution would not want to delve into such an endeavor. Some administrators, faculty, and students see online courses as an inferior type of education. This is why interested institutions should survey the parties involved before deciding on whether or not to offer online courses. Make sure that the constituents are ready for the new paradigm. Some students will pay higher amounts of money to physically attend more prestigious traditional-based institutions. If a school makes an investment in technology and the courses do not succeed, this could seriously deplete a school's finances. Some also argue that this large investment is worth it so that access to an institution is increased. As Inglis (1999) points out, what often happens is access is only granted to those who can afford technology but denied to those less fortunate, showing that a true digital divide exists.

What is important for this type of education to be successful

Unfortunately, online courses do not just occur. A well thought out plan must be in place before venturing into this realm. Some of the areas in which institutions must look include how they plan to use technology, centralization of their information technology support, instructional technology support for faculty and students, and buy-in from faculty, administrators, and potential students.

Using Technology as a Strategic Asset

One of the worst things an institution can do is hurry the purchase of technology to possess the latest and greatest tools. Graves (1999) concludes that the purchase and investment in technology should be approached in a way that technology becomes a strategic asset to an institution, instead of something forced on faculty and students. Often the integration of technology will not meet its concept. An institution should rely on research and evaluation to see if it is worth the technological investment for online courses (Graves, 1999).

In deciding how to use technology to its fullest benefit, investigation of the methodology instructors plan to use to deliver course materials is necessary. Turoff (1997) shows that without research regarding how individuals will use technology and training, the direct relationship between instructor and students, instead of improving through technology, may decline. This will more thoroughly isolate the content experts from the learners. Faculty peer groups and instructional technology teams should be established to review existing courses, survey faculty's information technology needs, and interview students to see if the investment in technology is worthwhile. Albeit most institutions may have already invested heavily, some will find that they have flooded faculty and students with too much at a given instance. They should have moved more slowly to integrate technology into academia.

Turoff (1997) believes institutions must realize the need to incorporate changes in the learning approach. One way to take advantage of technology is to have students help develop learning communities. Online students miss the interaction with other students. Instructors will create a course based on how they have been teaching it in a traditional classroom mode and perform a straight

translation with technology. Tuross's study (1997) found that some instructors will treat the course as a question-answer dialogue or a problem discussion section led by a teaching assistant and throw out the interaction. These courses often lead to poor reviews by students. This is a key reason that the investment in the technology necessary for courses must be accompanied by proper education of the individuals that will be designing and teaching courses.

Also important is the opinion of students who will be taking the courses. Bates (1997) points out that the success of online courses will be determined by the willingness and readiness of the students to tackle this type of course and delivery. Not only must a new way of thinking be developed by administrators and instructors, but also by students. Students must have the necessary technology available and skills to take advantage of the technology (Bates, 1997). Institutions must invest in technology training programs or courses for students. Providing necessary skills and resources is the only way an institution can successfully prepare students for this type of education. Some problems may arise from the technology itself. Zanville (1996) says that often institutions make an unwise investment in particular hardware or software technology which is difficult to master and requires sustained effort to use effectively.

A chapter in a book by Graves (1999) was particularly useful in determining areas of focus for integrating technology in higher education. Graves gave six points, termed his, Principles for Optimizing Investments in IT, that anyone investing in technology should consider. The six points are included here.

1. An institution's total IT investment should serve institutional strategic interests while being administered with enough flexibility to encourage and support innovation and entrepreneurship in the departments.
2. Formal institutional processes are required for selecting, developing or customizing, and installing any mission-critical application and should include input from both the central IT organization and a representative group of stakeholders, with a senior information technology officer holding veto power in the final selection decision.

3. An institution's senior information technology officer should be involved in any institution-wide strategic planning and budgeting processes. In turn, the central IT organization should assume responsibility for communicating about, and reporting progress toward, the institution's strategic vision for the deployment and use of IT.
4. Funding for an institution's central IT support organization should be placed on a recurring life-cycle basis to the extent possible, and should not overly rely on one-time sources or depreciation schedules not attuned to the rapid pace of technological change.
5. All of an institution's students and employees should have convenient and affordable access to a personal computer, with a basic collection of productivity software, that can be connected to the institution's network at any time and from almost any place they are working – the office, a library, a home or residence hall, a field location, or another remote location.
6. An institution should contain overall IT support costs by centrally supporting only a few specific configurations of personal computer hardware and productivity software to be replaced/updated on a technological life-cycle basis. Indeed, the central IT support organization should assume responsibility for the institution's IT architecture (standards) and organize departmental technical leadership to assist in the development of that architecture.

Turoff's paper (1997)-first written 18 years ago, and revised in 1997-on what is financially necessary to start the virtual university is very enlightening. Many of Turoff's points still hold true for an institution wishing to venture into online courses today. Turoff concentrated on informing administrators and faculty of the questions they should be answering before deciding to make their investment. He was concerned with how an institution insures quality and how it is to be measured; how student input will be used effectively to evaluate courses, faculty, and programs; what methods will be used to insure faculty will be effective at teaching with the technologies; the need to insure that there are appropriate social and emotional benefits to the institution; and the need to insure that students understand what they are getting

(Turoff, 1997). These questions should be a basis of surveys that are shared with faculty, IT staffs, and administrators before deciding to offer the first online course.

Centralization of IT Support

The centralization of IT support is one of the most hotly debated topics in higher education for the past few years. Does an institution centralize their information technology support or do they decentralize and allow each college/department/division support their own technology ventures? Because of personal experience at Marshall University, it is believed that centralized IT support seems to best benefit institutions in their effort to offer and support online courses.

Such a statement may offend many, and some are probably asking how this conclusion was drawn. Frankly, it is simple. Centralized support helps create a single system for offering online courses. How does this help? A single system helps students and faculty work with multiple courses without learning multiple systems. This makes sense when looking at savings for training time and costs in teaching support teams, faculty, and students multiple delivery systems.

Having centralized support and systems helps bring everyone on to the same track for planning and implementation. This opens the door for course designers to have a large number of resources to call upon, whether it is IT support, other faculty doing innovative things with the system, or a worldwide user community. Graves (1999) says, "broadly available core services give the greatest bang for the buck..." The centralized IT organization can help manage and better control these types of services as they become mature offerings for the institution.

Instructional Technology Support

After witnessing a venture start from the ground up, it is believed that instructional technology support is the key to success for online courses. Without timely and effective instructional technology support, online courses cannot and will not happen. Often a simple interaction with an instructional technology support individual helps an instructor start thinking in the right direction. This can help an

instructor toward designing their course material or assisting in getting over a barrier that is hindering progress.

One may ask, what makes instructional technology support different from other areas of technology support? Instructional technology presents special challenges that standardized help desk support usually cannot offer when it relates to online courses. It is an instructional technologist's duty to assist faculty in determining which opportunities exist in finding and implementing technology to fit course content. Many think it is the opposite--that the instructional technologist must fit an instructor's content to the technology. This limits the content and methods by which an instructor may offer their intellectual property. Faculty quickly determine that the incorporation of technology into an existing course cannot be done overnight or be seen as a simple addition to a course. Zanville (1996) wrote that with instructional technology assistance, faculty see it often requires a rethinking of objectives and instructional strategies, including discussions in pedagogy and curriculum design.

Even the most technologically sophisticated instructors often need help in choosing the technologies best suited for their content based on affordability, scalability, availability, and supportability. At Georgian College in Barrie, Ontario Canada, faculty are given eight hours per week for sixteen weeks to develop an online course. During this time, they are given the assistance of an instructional designer who puts in an equal amount of time. Instructional technologists must be involved in the technology selection, course development, and course offering processes through evaluation, training, and support. Institutions often undertake instructional technology initiatives, such as faculty grants, without accounting for the recurring life-cycle resource implications of the success of initiatives (Zanville, 1996).

To gauge how faculty perceived their own use of technology at Marshall University, a short survey was distributed to those teaching online. The survey asked faculty to analyze themselves on a scale of 1 (no knowledge) to 5 (expert user) in the areas of sending/receiving e-mail, searching the Internet, creating a web page, and the use of WebCT. A copy of this survey is contained in Appendix E. Table 6 contains the average responses of the 32 respondents.

Table 6: Analysis of results from faculty teaching online courses at Marshall University

Send or receive E-mail	4.56
Search for information on the Internet/World Wide Web	4.38
Create or edit a World Wide Web site	3.03
Use the product WebCT	3.47

This study is very important for Marshall University because it gives their Center for Instructional Technology an idea not only of how faculty perceive themselves, but also how well instructional technology training is perceived. Marshall University will continue to offer faculty development courses for those areas with a score of less than 4.5.

Faculty and Online Courses

One of the most important parties involved in the decision to offer online courses is faculty. If faculty are not provided with the proper training, tools, or have interest in this type of education, then online courses are not going to be successful. Faculty are often against online courses if planning is negated upfront. One of the first reactions from faculty who do not have the proper knowledge of online courses is that they are going to be replaced because of technology. Some faculty fear administration believes that the courses can be handled by adjuncts or that the distance learning courses will always be inferior to traditional courses. Turoff (1997) states that the quality of the program can be determined by the quality of the instructors and the culture of the institution, and that this can influence teaching methods. It is key to involve faculty in planning and provide them with as much detail on administrative plans for offering online courses.

It was useful to gather comments from several individuals who have taught online courses. These individuals were very positive about this type of education after teaching their first course online. Nonetheless, many have concerns that administrators should be aware of when planning for online courses. In addition to the issues previously mentioned, faculty stated concerns about such issues as student dishonesty, proper recognition for this type of work in the tenure process, proper pay, and he belief that the administration is forcing this type of education on institutions who are not even ready to

keep up with those who are already doing it. Improper ventures into online courses have resulted in some faculty members spending 200 to 300% more time preparing for and teaching online courses than traditional courses. Why is this? Such drastic changes in course offerings means there needs to be shifts in teaching behavior. Zanville (1996) points out that instructors often have problems adapting to teaching online and those who are forced into this role are uncomfortable from the outset. On the revenue side, administrators make the mistake of promoting that additional students means more money for the institution. John Morrison (personal communication, December 5, 1998) stated that this is an area where faculty are concerned about the possibility of having huge classes taught by one instructor. For more in-depth comments from faculty, please refer to the Selected Comments from the Developing Survey and Selected Comments from the Teaching Survey portions of this document, as well as Appendixes C and D.

There is one area that nearly all faculty note as being of utmost importance. If investments in faculty development were made, those who were not teaching online would consider it. Zanville (1996) points out that many institutions see online courses as "marginal", meaning instructors' reward structures and relative investment in critical faculty development or technical support resources are not provided (Zanville, 1996). This perception is what turns many faculty away.

Administration and Online Courses

Two principal mistakes administration can make is to introduce online courses to their faculty as a way to simply gain additional students or think technology will create cheaper courses. Cheaper costs may arise in courses that have material learned by drill and practice, but Turoff (1997) shows that it will not happen for courses that rely heavily on problem solving and critical thinking. Administration should look at technology as a way to improve the cost-effectiveness of education. This is not the same as reducing costs. Bates (1997) argues that for the same dollar expenditure learning effectiveness can be increased. If additional students can be taught to the same standard for the same level of investment, it is a wise investment in technology. There has to be insight and good reasoning behind such a venture and these reasons need to be discussed with faculty and students before a final decision is made.

Many administrators have stayed away from online courses because they fear the huge investment that is necessary to get online. This is a real concern. Do not think that by offering online courses that costs of teaching will drastically decrease immediately. Costs may decrease at some point in the future, but never at the outset. One of the biggest hurdles is attempting to determine how much money is needed during initial setup. Research shows that there are several ways to estimate costs, but who is right? Bates (2000) shows that administrators can attempt estimates with wild guesses, marginal costs (extra costs needed to put a course online), careful estimates (purpose of the paper and web site), and actual costs – measure each penny spent and recovered. A major problem in budgeting by using actual costs is that if you are measuring this way, resources have already been committed in some way. The accompanying web site helps to clarify some strong estimates for administrators in the area of costs. How one ultimately costs technology depends on the type of decisions to be made and by whom. Bates argues that what is of utmost importance is that all costs be identified, that the assumptions underlying costs be understood, and that reasons for including or excluding the various costs be valid (Bates, 2000). In performing costing exercises, some shy away and say that traditional teaching is much cheaper. If they have never attempted it, how do they know? Bates agrees that it is very difficult to find the costs of using technology in traditional courses because it is integrated into regular costs of teaching, usually buried in faculty salaries and support personnel (Bates, 2000).

Administrators are also concerned about such areas as accreditation of online courses, improving learning experiences, time and effort required by faculty, and retention rates. Accreditation has been a key discussion area for the past several years, but is beginning to take a back seat when Jones International University, a totally online degree granting institution, was fully accredited. As for improving learning experiences, Inglis (1999) points out that when done correctly, online courses do offer the possibility of improving the quality of students' learning experiences and increasing access to an institution. When it comes to time and effort, this is one of the nearly unavoidable areas encountered with the offering of online courses. Even though development time for courses is usually increased because of new ways of thinking, administrators should think of development time in reference to completing goals,

objectives, and/or competencies. As Phil Rasmussen (personal communication, December 8, 1999) stated, "seat time should be out the window as it doesn't measure anything educationally but only provides a convenient way for bean counters and administrators to measure faculty involvement."

Retention rates for distance education have been a concern since the 1920s (Russell, 1999). Depending on the view, one could argue that the theory of no significant difference between delivery methods is true. Some of the findings for retention rates relates to the opinions that students have about the quality of the courses. During the first few offerings, while the institution is getting used to online courses, retention rates may seem low. Often times, instructors are still getting used to these courses, while at the same time students are taking their first plunge into distance learning. Data from UCLA shows that during the first few quarters of online course offerings, retention rates were at 50-60 percent. Carr (1999) shows that over the past eight semesters, UCLA is seeing retention rates of 87 percent in their online courses, with nearly 1300 students taking online courses each semester. Findings through an online course taught by the author attest to these figures. Over the course's first five offerings, completion rates were at 71%. Over the next seven offerings, currently completion is only at 60%, but all seven are still running. This figure actually reflects that 60% have finished before the term is over. Over the past two years, Marshall University has seen a retention rate of nearly 78% in its online offerings.

Instructors are helping these retention figures by using feedback from students and turning it into constructive criticism to improve their course. Carr (1999) reported that Emilio Ramos, dean of academic and administrative technology at the LeCroy center, believed that switching to an interactive system with chats and electronic mail helped to increase retention rates from 62 to 90 percent. "The key to having low attrition and successful completion in the online medium is the ability of instructors to keep the students engaged, and that requires quite a bit of effort from the instructor's point of view," Ramos said.

Administrators believe they can assist with cutting costs by placing adjuncts as instructors for online courses. People also argue that those who are retired will work for considerably less. Adjuncts are often paid at one-fifth the rate of faculty teaching the exact same course, often using the regular faculty's material. Administration believes this is a way to reduce costs, often offending faculty and students who

do not see adjuncts as providing the same quality instruction. Turoff (1997) points out that this is one reason that accrediting agencies are concerned with the number of adjuncts teaching in any accredited program. If an institution wishes to deploy the best courses, they must realize that they will pay for the quality they deliver (Turoff, 1997).

Students and Online Courses

Similar to faculty and administrators, student opinions of online courses are mixed. Those whose first experiences seem to be positive are those taking additional courses. Those who take an online course that was either of poor quality or one in which they did not understand the technology are those providing poor evaluations. Carr (1999) provided a report revolving around a student who had completed two courses successfully before dropping out of a third. The course that was dropped was because of the nature of the course. The student reflected that it was the instructor's first online offering and the material had been set up in a difficult to follow manner (Carr, 1999). This just strengthens what was mentioned before—an institution must provide for faculty development and training, including developing an overall plan for what they wish to accomplish before opening online courses to students.

One area that an institution should consider when creating the plan is the offering of online degrees. Why offer online courses if students do not have something that they can work toward? Students should have a goal to obtain. Offering courses over a wide variety of topics is not the way to go. Students who take online courses are usually those who do not have the time to attend traditional courses, professional students working to further their education while maintaining a career. To be successful, the infrastructure must be in place to make it as easy as possible for students to continue their education.

Carr (1999) and Young (2000) share some of the data that has been gathered from students who have taken online courses. In the article by Carr, the same student who had taken two courses and dropped a third has also seen successful instructors lose large numbers of students, often beyond the instructor's control (Carr, 1999). Students take an online course thinking the course will be easier than a traditional course. Because of their lack of discipline needed for this type of education, they quickly get

over their head. "You don't realize how much is involved until you get into it," says Chuck Kurfman, a 33-year-old student at the University of Illinois at Springfield. "With this kind of class, there are things you could do every day. It's almost worse than going to class every week" (Young, 2000).

Students are often misled with expectations of online courses. One of the largest complaints students have is that they do not receive instant feedback from their instructor. Many believe that just because the course is taking advantage of advances in technology, the instructor will provide instant feedback. The problem crops up when students need to ask a question about something they do not understand. Young (2000) points out that whereas in the classroom, students can raise their hand and get an answer, they often have to wait a day or more for an electronic answer. By the time they receive their answer, many have forgotten why they were asking the question in the first place. It is essential for instructors to consider these problems. The best method may be to use these questions and feedback received from students to either change the way material is presented or build intelligent answer systems. Gale (2000) suggests that to get a true feel for how students perceive a course, try taking one yourself. This could help faculty who are considering teaching online.

Another challenging area for students is examinations. Many point out that instructors worry students are cheating or having others take the tests. This is causing instructors to require students to take exams at central locations, which defeats the purpose of online courses. Students who take the course for convenience are being inconvenienced because of travel. If students are mature enough to take an online course, one can only hope that they are mature enough to be honest.

Interactive Web Site for Determining Costs

The original goal of this study was to produce results that would not only help Marshall University in future planning endeavors, but also other higher education institutions considering online courses. This led to the creation of a web site where individuals could answer questions about their institution and their plans for online course offerings. This is to help determine if this type of endeavor is feasible for their institution. This web site can be found at <http://webpages.marshall.edu/~morgan16/onlinecosts/>. Instructions on how to use the site are contained at the location. Information regarding how the site works and why it was developed is contained herein.

Disclaimer

The content of the accompanying web site is intended to be used only as a guide. If you rely on the information on this site, you are responsible for ensuring by independent verification its accuracy or completeness. A great deal of research was completed to develop the site and the information that it represents. The user assumes all risk by using the information and data related to this website.

How the Site Works

The accompanying web site will guide a user through the process of answering questions about their institution and then walk them through establishing the costs associated with the offering of online courses. The site is built upon Microsoft's Active Server Pages (ASP) scripting language to store a user's answers, perform calculations, and format the results returned to a user's web browser. The site was written entirely by the author of this paper, and a flow of how a user navigates the site is shown in Figure 3.

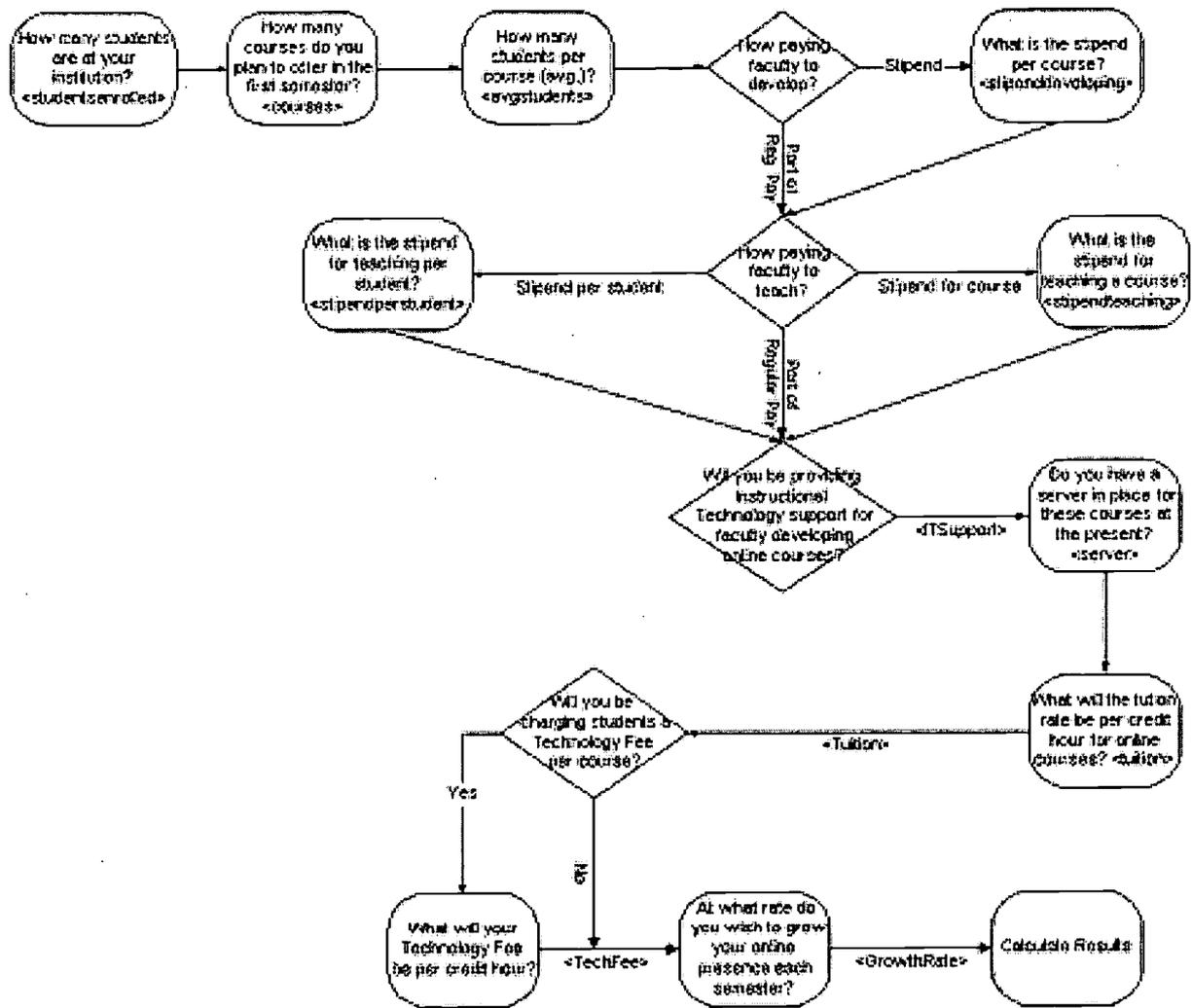


Figure 3: Data Flow for Determining Costs Web Site

When a user visits <http://webpages.marshall.edu/~morgan16/onlinecosts/>, they must first agree to the site disclaimer. Once they agree to the disclaimer, they will transfer to a page where they begin entering data as it is presented to them in the form of a single question per screen. Users will be able to take their time and concentrate on an individual question without the page being cluttered with data or questions. Under each question will be an area explaining what type of data should be entered for the question and an example relating to Marshall University.

The first question is the determination of the size of the user’s institution. This is the most important part of the entire process, but probably does not appear significant to the user. In developing

the site it was determined that the best way to calculate shared and support costs is based on the size of the user's institution compared to Marshall University and its 16,000 students. This is done because it is seen as the easiest constant to compare between any two institutions.

The next question sets the stage for the beginning of the calculations for the continued growth of online courses at the institution. The question allows the user to set the initial number of online courses that will be offered. Later, the user will determine by what percentage the institution wishes their online presence to grow, helping to determine additional costs and revenue streams. Next, the user is able to enter the average number of students that are expected per course. Everyone knows that each course will be different in its enrollment figures, but providing an average is a good way to proceed with estimated calculations.

The next area deals with how an institution will pay faculty to develop online courses. The first question will determine the method of payment, whether as a stipend for developing a course in the form of monetary reward or release time, or if the courses will be developed as part of the developer's regular pay. If the user selects stipend, the site will then ask the user to enter the amount of the stipend per course for developers. If the user selects as part of the regular pay, the site will proceed to the compensation for teaching section.

The compensation for the teaching of online courses segment is similar to the development section in that it starts with a question regarding how one will be compensated. This question provides the user with three options: paid as part of their regular pay, a flat rate stipend per course, or a stipend per student enrolled in the course. Depending on the user's answer, the site asks the user for the proper amount of compensation.

After determining compensation, the site will ask questions on support issues for online courses. The first is a yes or no question asking if instructional technology support will be provided to developers and instructors. The other is whether the institution already has a server in place or not to house courses. No matter the answer, a new server will be calculated into the costs every three years, and the cost of this server will be spread out over a three-year period.

The next section determines the institution's revenue stream. The questions regarding tuition and technology fees are presented to the user. The first question asks for the tuition rate per credit hour. The second question asks if a technology fee for online courses will be charged. If the answer is yes, the site will ask for the rate per credit hour for this technology fee. If the answer is no, the site continues to its last question. For calculations, each course will be assumed a three credit hour course.

The final question determines the projected growth of online courses. The answer to this question will be used to draw from the costs and revenues generated in the first year to build years two through seven. Once this value is entered, the site will calculate and return several tables containing the results of the input. After a user reviews the data, they will be able to click on a given variable in the list and change their input to see what effect that would have on their results.

How Costs and Revenues are Calculated

The reason that participation in the two surveys developed was requested was to assist in building and testing the web site. Based on the answers from the surveys and the results from costs found at Marshall University, it is believed that this site provides a fair estimate of the costs an institution would encounter in deciding to offer online courses. Even though there will never be a set formula for determining costs for online courses, the method developed is extremely efficient.

What the site does is build upon the user's entries to calculate the costs that an institution will most likely incur. Even though the user does not enter information for help desk support, library support, hidden costs, online course administration, and other costs that were contained in the Marshall University cost section, these costs are included. They are calculated based on the enrollment at the institution as compared to Marshall. Other costs are determined by information entered for the method of compensation and the number of courses. These numbers are straight calculations to determine the costs of development and teaching compensation. With the number of courses, average students, and growth rate, calculations to determine costs over seven years are included in the results.

Costs involving human services, such as help desk support, library support, instructional technology support, business manager, and a server administrator are calculated based on enrollment, but the rate never drops below 80% of the rate of Marshall University. The reason that these calculations are based on enrollments at an institution is that if an institution shows that they are going to offer one online course in its first year and also provide instructional technology support, it would not be fair to calculate rates for IT support for a single course as compared to a part-time position. In addition, the rate of 80% was chosen because when you look at smaller institutions, for example, one with 3000 students, rates would be calculated at only 18.8% of what Marshall compensates. For help desk support, this would be \$1.80 per hour. This was deemed a necessity because such rates are unfeasible and would not be meaningful if calculated in a true linear fashion compared to Marshall. The reason Marshall University's pay rates were chosen to be the standard is because of the school's SREB classification. Marshall is considered to be in the 90th percentile in rates of pay compared to peer SREB schools.

Online Development/Teaching Surveys

Since there is not a plethora of literature regarding costs of online courses or a concrete answer to the question at hand, it was necessary to survey a wide variety of individuals who have developed or taught such courses. By gaining insight regarding how much effort is required of others and how they are compensated, a better understanding of how to develop the interactive web site was achieved. To accomplish this, two separate surveys were developed: one to obtain information regarding costs and efforts to develop online courses and one to determine the costs and efforts to teach online courses.

Developing Online Courses Survey

The purpose of the first survey developed was to help determine how institutions currently offering online courses are funding development. This survey asked a variety of questions including the method of compensation for development and the time spent in development activities. Information regarding 118 online courses was received from institutions around the world. A copy of the survey instrument can be found in Appendix A. A compilation of results and comments received (minus names) are contained in Appendix C.

One of the most interesting results found from the survey was a high percentage of courses developed as part of the individual's regular pay (38/118). Research has shown that either paying individuals stipends or providing release time for online courses has produced better results. Some form of compensation to developers has gotten individuals interested who otherwise would not have been. Many of those surveyed stated that stipends, release time, or recognition for the development of such courses would aid in convincing others of trying their hand at this type of development.

A summary of the results obtained from the developing online course survey is contained in Table 7 and Figures 4 and 5.

Table 7: Summary of Results from Developing Online Courses Survey

Total Number of Courses/Credit Hours	118/350
Number of Courses/Credit Hours developed as part of Regular Pay	38/110

Number of Courses/Credit Hours developed given release time	9/30
Number of Courses/Credit Hours developed with Stipend Payment	71/210
Average stipend per credit hour paid to those developing with stipend pay	\$1260.00
Highest stipend paid per credit hour	\$21,125.00
Lowest stipend paid per credit hour	\$191.67
Breakdown of Respondents (number of courses from each)	
4 Year Institutions – Total	69
Full-Time Faculty Members	40
Part-Time Faculty Members	6
Information Technology Specialists	22
Consultants	1
Community College	29
Full-Time Faculty Members	25
Part-Time Faculty Members	3
Information Technology Specialists	0
Consultants	1
Graduate College	16
Full-Time Faculty Members	14
Part-Time Faculty Members	1
Information Technology Specialists	0
Consultants	1
Technical School	3
Full-Time Faculty Members	3
Part-Time Faculty Members	0
Information Technology Specialists	0
Consultants	0
2 Year Institutions	1
Full-Time Faculty Members	0
Part-Time Faculty Members	0
Information Technology Specialists	1
Consultants	0
Technology tools used to develop courses	
WebCT	70
Plain HTML (using tools such as FrontPage or Dreamweaver)	37
CyberClass	6
Other	5
Average answers to questions regarding % of time spent developing (answers are per course)	
Percentage of total work hours per week spent developing an online course	25.95%
Average weeks spent developing an online course	17.01 weeks
Learning how to use the specific software and/or hardware technologies in order to develop your course	12.82%
Online course syllabus development	6.52%
Course interaction development (E-mail, bulletin boards, etc.)	6.73%
Course learning activities development (quizzes, exams, self tests, assignments)	15.80%
Course content development (includes gathering instructional material,	30.43%

conversion, etc.)	
Development of multimedia content (video, audio, animations)	4.75%
Determining best pedagogical approaches for online course	6.07%
Designing layout of course	8.96%
Testing of course's technical components	5.96%
Copyright Clearance	1.81%

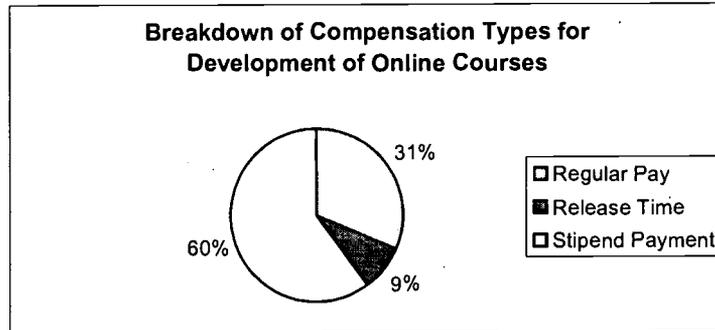


Figure 4: Breakdown of Compensation Types for Development of Online Courses

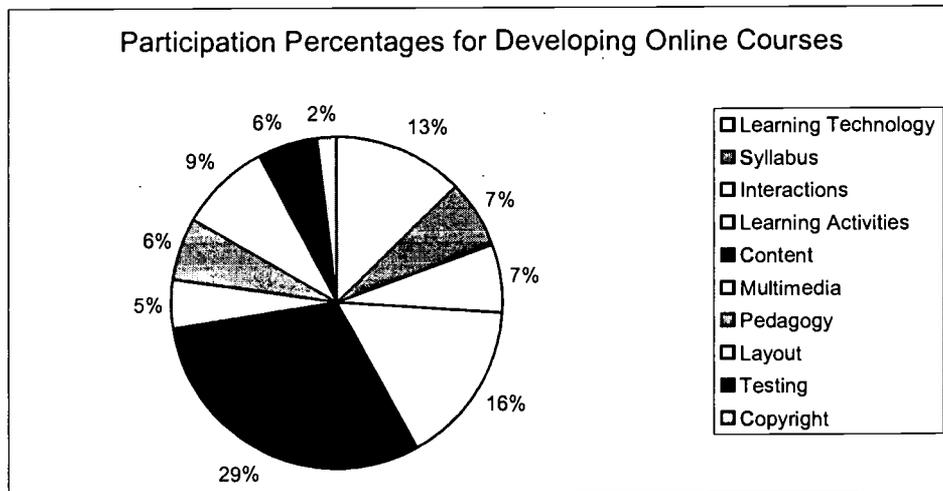


Figure 5: Participation Percentages for Developing Online Courses

Selected Comments from Developing Survey

Each of the surveys contained areas where individuals could express what they considered barriers for either developing or teaching online courses. Even though these areas could not easily be statistically measured, the content of many was interesting. For purposes of confidentiality, permission was asked of each comment contained here.

In analyzing information from the developing courses survey, the greatest barriers for developing courses were stated to be the time involved, lack of monetary or other reward systems especially in the lines of promotion and tenure, and any other form of motivation provided to developers. Other less significant barriers mentioned by several individuals included a lack of understanding of how to teach in the online environment and lack of administrator's understanding of online education. One developer alluded to this when he said "too many times, professors use on-line courses like traditional courses, which simply dispense information (lecture notes, assignments) rather than as a collaborative and generative learning tool." Online courses cannot take on this form if they are to be successful.

When a developer begins the development phase, they often struggle with the translation of course material to the online environment. An instructor from a Canadian university summed it up by saying it was a "lack of understanding on how to increase student interactivity. The course must be more than an electronic photocopy machine or an electronic correspondence course. How the teacher combines different learning/teaching styles into a cohesive whole is difficult." It is often very difficult to have someone who has been teaching in a given mode for a number of years to easily change their thinking. This is why development or teaching of online courses is not for every instructor. A course developer from a university in Minnesota had more to say about the creation of courses and the support process. This person wrote that there is a lack of understanding about the "need for paid professional support staff in the department as a way to assist faculty to teach this way and maintain a reasonable schedule. TAs/RAs who are students themselves CAN NOT be the support!" An instructor from another Canadian University agreed when she stated a major barrier was "hiring dependable subject matter experts who have sufficient release time to write modules for on line presentation." She added that at their institution, "to save money, grad[uate] students are often hired at greatly reduced costs compared to hiring professional staff. However this leads to problems of insufficient time on task. Students have other priorities and getting a course on line according to timelines isn't one of them. While they work cheap, they also work slow."

There were several strong comments regarding the time it takes to develop online courses. One instructor stated the greatest barriers to online course development were time constraints, load of other duties, and the fact there is no reward system in place for developing the online courses towards tenure-track consideration. "Considering the amount of time that I have spent developing the online course, I have not received documentation that I will obtain significant consideration for this course development in my tenure-track review." Another developer from the United States had more to say about the time it takes to develop an online course. This developer/instructor even had what he deemed as a "GREAT support staff" but claimed that it took a minimum of 500 hours per credit hour to develop an existing course, and estimated that it would take double that time to create a new course, and an average of .5 hours/week/student teaching the course. There are no courses at Marshall University that have taken this long, but it is possible given elaborate technologies and pedagogical design.

Another developer from Canada was a bit more expressive. He stated that the greatest barrier was a lack of technical help. At this university, interested faculty design their own course based on interest. "There is little face to face help in course design. This results in far too much time spent on technicalities that could be spent on pedagogy." This person said the support at their college is very weak, resulting in there not being enough of a demand for these courses. This developer also alluded to the costs involved in developing such a course, such as training, ISP access, etc., and felt that they would never recoup a portion of their out-of-pocket expenses.

Teaching Online Courses Survey

After gathering information regarding the development of online courses, a survey on the teaching of such courses was sent to the same lists where the development survey was sent. This survey was prepared in hopes of finding how individuals were compensated for teaching online courses and to find how much time was spent teaching online courses compared to the teaching of traditional courses. Information from 110 online courses was received. A copy of the survey instrument can be found in Appendix B. A copy of the results and comments received (minus names) are contained in Appendix D.

A summary of the results obtained from the teaching online courses survey is contained in Table 8 and Figures 6 and 7.

Table 8: Summary of Results from Teaching Online Courses Survey

Total Number of Courses/Credit Hours	110/341
Number of Courses/Credit Hours taught as part of Regular Pay	59/184
Number of Courses/Credit Hours taught paid a flat stipend per course	29/91
Number of Courses/Credit Hours taught paid a stipend per student enrolled	22/66
Average stipend per credit hour paid to those teaching with flat rate stipend pay	\$661.76
Highest stipend paid per credit hour	\$1666.67
Lowest stipend paid per credit hour	\$333.33
Average stipend per student paid to those teaching with per student stipend pay	\$160.00
Highest stipend paid per student	\$250.00
Lowest stipend paid per student	\$40.00
Breakdown of Respondents (number of courses from each)	
4 Year Institutions	18
Community College	31
Graduate College	49
Technical School	8
2 Year Institutions	4
Average answers to questions regarding % of time spent teaching (answers are per course)	
Percent of work time spent teaching an online course	32.11%
Number of courses who reported time comparisons teaching online courses to traditional courses.	
Number who reported spending more time teaching online courses	83
Number who reported spending less time teaching online courses	14
Number who reported spending about the same time teaching online courses	13
Teaching the students how to access the course materials and progress through the course	7.80%
Reading and responding to course related e-mail	32.94%
Online course office hours	6.18%
Grading of assignments and/or exams	23.61%
Course Maintenance	14.73%
Participating in class interactions (chat, bulletin board, whiteboard, or any other type of synchronous communication)	11.40%
Other	3.66%

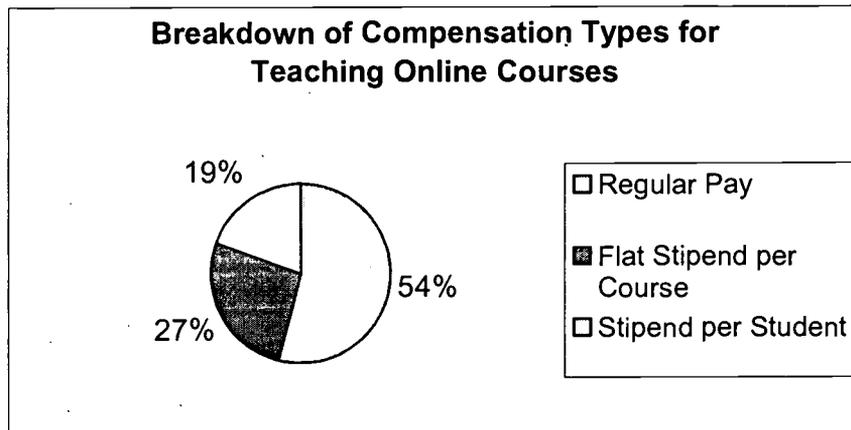


Figure 6: Breakdown of Compensation Types for Teaching Online Courses

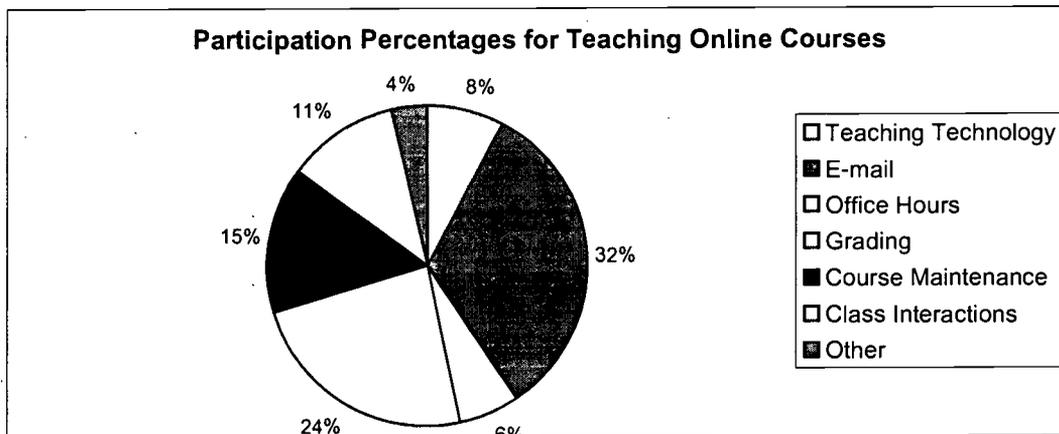


Figure 7: Participation Percentages for Teaching Online Courses

Selected Comments from Teaching Survey

Survey respondents identified the time it takes to teach a course, lack of rewards in the form of compensation or tenure and promotion processes, lack of preparedness on the part of the student, and the lack of interaction with students as the greatest barriers to online instruction. One instructor claimed to be spending “about 200 to 300% more time preparing to and teaching online than I did when I taught in the traditional classroom.” He was very positive, though, in the sense that he added that even though “the time investment is enormous” he still “love[s] the work.”

It is interesting that the largest barrier found from both the developing and teaching survey was that this type of education consumes a tremendous amount of time. Rockwell (1999) confirmed this in a survey she did. Sixty-nine percent of the respondents to Rockwell's survey reported that the largest obstacle to online courses was the time requirement. One faculty member from a university in South Carolina summed it up best by saying "I need to sleep and eat." This individual has developed 10 online courses and teaches about 100 students online in four or more courses each semester. He said that the lack of time to do anything else is the greatest barrier because it is "very labor intensive."

In relation to the lack of interaction with students, one instructor claimed "it is remarkably easy to start and maintain a miscommunication with only the written word for communication. When one can speak in front of a traditional class, he or she can SEE if someone has 'lost it', and back up to try again. With no real contact, a student can go an entire semester with incorrect ideas of what is expected of him." Another instructor alluded to a barrier as not being able to see student's reactions. "Reading is still not the same as seeing visual aids an instructor utilizes. The explanations and interaction are not as prevalent with online coursework. Many want the credits without the usual course intercommunication." Another instructor stated that they "don't think this kind of course can, or should, replace more traditional classes. The instructor-student interaction is an important element of the instructional process, for both parties." At the same time, one instructor claims that this is "the wave of the future," and still another who had taught four classes said "I see NO barriers, yet some revision comes forth as student feedback is implemented. But I don't see this as a barrier." Many have taken a dual stand in this regard. It goes back to how well instructors are informed about how to teach in this environment as to whether or not this is seen as a barrier. Rockwell found that 83% of those surveyed found that providing innovative instruction was the largest incentive to teach online (Rockwell, 1999).

Several individuals who both developed and taught online courses stated their concern that administration does not recognize their additional accomplishments when it comes to rewards, promotion, or tenure. Olcott (1999) says that it is important to consider the current rewards and incentive systems so that distance teaching receives equitable applicability towards promotion and tenure. One instructor

stated that “there should be some consistency among universities (in adequacy of pay) if distance education is going to be quality education. In addition there needs to be some recognition built into faculty evaluation for teaching a distance learning course and for technological innovation. If institutions are interested in quality they should recognize and reward it.” Another blames the administration at their University for the problem. “It is a tremendous outlay of time to design a quality course, teach it well, and maintain it, but there is very little recognition on the part of administration that it differs at all from the traditional classroom. Online teaching is dramatically different and the load issues and other faculty related concerns need to be redesigned to better fit this method of instruction.” One instructor from Australia looked at this a bit differently in saying “I don't think university administrators appreciate the effort involved in creating and maintaining WWW courses -- but they certainly are happy to take the ‘profits’...”

In preparing this information, there was an advantage to having developed and taught an online course. Because of teaching in the traditional classroom and background in the use of technology, there does not seem to be any barriers to developing a course. The greatest barrier perceived is in the area of instruction. As others agree, the barrier is the lack of preparedness on the part of the student. This is also a major concern of another faculty member at Marshall University who believes that students “have the wrong attitude--that this is supposed to be a short-cut through a course. Students who want to navigate the course in the manner they choose rather than follow the syllabus are problems.” Others agree. An instructor from a community college in the US claims to spend more time “teaching technology and less of it teaching my subject matter” because of a lack of technological preparedness. Many simply “are not trained (or otherwise prepared) to take an online class in general. They have no concept of the time and self motivation needed to complete the course.” Along the same lines, faculty are concerned with the ability of students to discipline themselves to the rigors of working independently. “Students are surprised at the amount of work it takes for them to read a chapter, work a problem, send a message, etc.”

The statement of another instructor about attitudes among administrators and colleagues is particularly interesting. He stated that “it is widely perceived that I am not working as hard because I do

some of the email work from home and I don't meet with students in the traditional classroom.” This may be because some people are simply taking traditional material and placing it online and calling it a course. “It takes a great deal of time to put together a quality course and only a minimal amount of time to slap together a very basic course.” One instructor believes that “online/distance education is here to stay. Students of all ages prefer it to synchronous learning for the simple reason of convenience. It is not necessarily BETTER than the traditional format, just different.”

In reading the comments received from developers and instructors, one stood out as being particularly insightful and interesting. This individual summed up the barriers to online education as follows: “Lack of enough support, lack of adequate reimbursement for development time, inadequate resources, inadequate graphics, outdated computer systems, lack of consistent student hardware and software requirements, technical problems getting tests to function online, lack of university acknowledging online office hours, lack of laptops to allow faculty to ‘teach from home’, inadequate definition of ‘distance’ education and ‘distance education students’, misperception of time necessary to develop and teach an online course, lack of data/statistics concerning online development requirements, inadequate online course evaluation methods, lack of networking among universities, fear of loss of employment due to distance education and reduced student oncampus attendance, continued ‘out-of-state’ tuition for distance education courses, inadequate distance education identification/designation in course bulletins and for registration and in Registrar's offices, lack of faculty time, high university committee expectations, tenure and an impetus for publication and research that may not allow a focus for distance education, rapid technological changes, inadequate funding to maintain distance education classrooms, lack of statistics revealing the actual student/participant learning that occurs in distance education/online courses compared to classroom control populations, the steep learning curve for faculty, an overwhelming sensation found in the knowledge expert who becomes the technophyte and may ‘lose face’ in a course of ‘students’ who are computer literate ...just to name a few items that come to mind...”

Several individuals perceive negative images of online courses. Other's comments certify even though this type of education can be extremely time consuming, it can be beneficial to everyone involved. All of the submissions from both surveys can be reviewed in Appendixes B and D.

What Do the Results Represent?

It was surprising to see the breakdown of courses from the development survey in comparison to the teaching survey. It was apparent that primarily a different group of people took part in the surveys. The development survey contained 58% of the responses from 4-year institutions while the teaching survey had 16% of the responses from 4-year institutions, but 44% from graduate institutions. Based on these results, it is hard to determine how many individuals get to teach the courses they develop. Perhaps this is one area that is flawed. The two surveys should be combined. Even though a given course cannot be followed from development to teaching, some interesting conclusions were drawn for use in developing the accompanying web site.

The results obtained in both surveys reinforce the statement that there is no set formula for compensation rates. In the developmental survey, there is a \$20,933.33 range between the highest and lowest stipends per credit hour. This is partly due to one developer receiving \$85,000 to develop a single course. There is a \$1333.34 range in the rate between the highest and lowest flat rate stipends paid for teaching online courses. These differences can exist for a number of reasons. Tuition may be higher at those institutions paying higher rates or other schools may not have had a guide to consult before deciding on what to pay faculty. A similar range exists for the pay to those teaching receiving a stipend per student enrolled. Although this gap is much lower (\$210), it follows suit that no two institutions pay the same, just as they do not pay the same in traditional teaching salaries.

Looking at the results obtained from the teaching survey, you will see that more than 56% of an instructor's time is spent corresponding with students through e-mail and grading assignments. When you think about a traditional course, the largest amount of time is usually spent presenting material. Online courses lend themselves differently in that there are usually no lectures or scheduled classes.

These results support research that implies that students require high amounts of interaction in online courses.

One of the most interesting questions asked on the teaching survey was for instructors to tell how much time on average they spend teaching their online courses and relate how this corresponds to a traditional course--whether the time was higher, lower, or about the same and by how much was there a difference. Of the 110 courses, 83 report that more time is spent teaching online courses, while only 14 reported that it takes less time to teach online. It is necessary to analyze the responses to see by what factor the time was increased for those 83 courses. Please note that there was no scientific approach to this attempt because of relying on estimates from the instructors. It was found that of those people who reported and tried to quantify how much more time was involved, they reported a 52.6% increase in the time required to teach online courses. Some reported that the time is nearly double traditional courses. Some of the reasons reported causing this increase were the increased time spent interacting with students, higher enrollments, and high amounts of time to develop material. One should consider this when determining compensation rates and the maximum enrollments for online courses.

In the development survey, it was interesting that 65% of respondents reported developing online courses using WebCT. WebCT claims to be the most popular online course delivery tool in the world, but these results may represent this fact or because these were the individuals inclined to respond. This is hard to tell because the surveys were sent to six international list serves governing distance learning, one of which was the WebCT user's list.

One result that may be questionable is the average time spent developing courses. The results obtained reported that developers on average spent 25.95% of their time for 17.01 weeks to develop their online course. Assuming a 40-hour workweek, this translates to approximately 176 hours to develop a three-hour course. Not everyone works a 40-hour week. Additional information should have been obtained in this area, especially as this is becoming one of the more controversial areas in higher education--the dreaded formula for development of online courses.

The surveys provided not only tremendous comments, but also a basis to check the results from input through the accompanying web site (<http://webpages.marshall.edu/~morgan16/onlinecosts>).

Averages of the results are displayed in pop-up help menus to give respondents a basis for what to enter if they are unsure. Results have been checked against data from Marshall University and results from those around the world.

Online Student Survey

Information contained in this section was obtained from Marshall University. Marshall surveys students who have completed online courses using the Teaching, Learning and Technology (TLT) Group's Flashlight Current Student Inventory. Because of confidentiality, results are presented without relation to specific students or courses taken at the University.

Aggregate results

Even though the Flashlight Current Student Inventory survey from Marshall is 26 questions in length (see Appendix F) only the questions dealing with student's opinions of the technology used and their answers relating to how well they perceived online courses are contained herein. Sixty-seven respondents are contained in the results shown in Table 9. Even though Marshall University has implemented this survey over the past two years, its completion has not been enforced.

Table 9: Summary of Results from the Flashlight Current Student Inventory

Questions	Answer Ranges with Score Determinations	Average Answer
At the beginning of this course, rate your knowledge of how to use WebCT.	1 – no knowledge 5 – expert user	2.28
The <u>pace</u> of the training provided on the use of this technology for this course was:	3 – too fast for me to follow 2 – just right 1 – too slow	2.09
In a typical week during this semester, approximately how much time did you spend in each of the following activities (in hours):	1 – less than one 2 – one to two 3 – three to five 4 – six to nine 5 – ten or more	
Interacting with an instructor or other students at Marshall University by way of <u>E-mail or other "time-delayed" electronic communication</u> (such as bulletin boards or discussion lists)?		1.76
Interacting with an instructor or other students <u>at your institution</u> by way of a <u>chat group or other "real-time" electronic communication</u> (simultaneous, multi-user computer discussion) for this course?		1.57
<u>Electronically searching</u> Marshall University <u>library catalog</u> from a remote site (such as home, a		2.02

community library, a remote/community learning center, etc.)?		
Accessing the <u>Internet/World Wide Web</u> to view or download course materials, view a multimedia presentation, use a self-paced instructional program, pick up and/or complete assignments, or take an examination?		2.32
Indicate how strongly you agree or disagree with each of the following statements:	1 – strongly disagree 2 – disagree 3 – agree 4 – strongly agree	
I am more comfortable participating in discussions in <u>this course</u> , than I am in other courses.		2.66
I received comments on assignments or examinations for <u>this course</u> quickly		3.30
I would recommend that others take a course that uses electronic communication, such as electronic mail, chat rooms, Bulletin Boards and/or computer conferencing		3.27
I would recommend that others take a course that uses WebCT		3.30
I would recommend that others take a course that uses materials (course modules, multimedia texts, etc.) on the World Wide Web Internet		3.39
Overall, I have been:	1 – very dissatisfied 2 – dissatisfied 3 – satisfied 4 – very satisfied	3.00

What Do the Results Represent

Students taking online courses at Marshall University who have previously taken online courses have been pleased with their experiences, with scores being in the upper range on nearly all questions. One can assume that the majority of students did not have to spend as much time with their online courses as traditional courses, as answers regarding time spent with course materials were in the one to two hour range per week. It was also interesting to see that in questions regarding satisfaction, only 5 of 325 answers contained a Very Dissatisfied response. Of these five, two were from the same person, someone who also stated that they were very dissatisfied with the entire course process.

Marshall University could learn a few things from reviewing not only the aggregate data, but also by sharing comments accumulated with the instructors developing and teaching the courses. Question

#26 (not contained in Table 9) allowed students to list three things perceived to be the greatest barriers for taking online courses. When students did complain, it was usually regarding how the instructors were teaching the courses. Some students were unhappy with their instructor's failure to provide feedback to them in a timely fashion, with confusing assignments or directions, and with the absence of adequate material on the web. This shows that students had to rely solely on their textbook for some courses.

Some of the most interesting comments were from students stating they were upset with learning the technologies associated with their course. It is believed that these are the students instructors mentioned in their survey postings. These students are not motivated or disciplined enough to succeed with an online course. All one has to do is look at the average score on the student's knowledge of the technology at the beginning of the course to see how this could have affected them. Perhaps requiring students to attend a training session on how to use the technology before accessing course materials will help with this matter. It was interesting that none of the 67 who responded stated that the training provided for how to use WebCT was too slow for them. Having an instructional technologist at the institution meet with faculty and discuss the design and implementation of their course with these results, as well as having information provided to students updated each semester with frequently asked questions, policies and procedures, and self-study questionnaires, can greatly assist Marshall University in its offering of online courses.

Summary

The question that institutions of higher education need to answer before starting a venture into online courses is, "is it worth it?" The answer is not yes or no but rather, "it depends." In every case, institutions must consider all possible costs. The author hopes that this study has helped to identify the key cost areas, either tangible or intangible, and will help institutions determine if online course programs will benefit them. Institutions can learn what online instruction may cost by completing the survey on the accompanying web site (<http://webpages.marshall.edu/~morgan16/onlinecosts/>). The web site will guide a user through the process of answering questions about their institution and then walk them through establishing the costs associated with the offering of online courses. The site is built upon Microsoft's Active Server Pages (ASP) scripting language to store a user's answers, perform calculations, and format the results in a printable fashion through a user's web browser.

Since there is not a plethora of literature regarding costs of online courses or a concrete answer to the question at hand, it was necessary to survey a wide variety of individuals who have developed or taught such courses. By gaining insight regarding how much effort is required of others and how they are compensated, a better understanding of how to develop the interactive web site was achieved. To accomplish this, two separate surveys were developed: one to obtain information regarding costs and efforts to develop online courses and one to determine the costs and efforts to teach online courses. The surveys provided not only tremendous comments, but also a basis to check results from input through the web site. Results have been checked against data from Marshall University and from results obtained through the surveys.

Once an institution determines that a program of online courses may be appropriate for them, it must have a plan in place for what it wishes to accomplish. All constituents of an institution, including faculty, administrators, and students should be involved in developing this plan. This kind of all-inclusive planning process will help ensure that all sectors of the university will understand and appreciate online instruction, and hopefully, will support it. This plan should cover how courses will be

developed, offered, funded, and delivered. The plan should also state institutional goals for online offerings. Institutions that proceed without a plan and without adequate training for faculty and students will find that a successful program of online courses will be difficult to achieve.

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Appendix A Developing Online Courses Survey

As part of my Master's Capstone Project for the completion of an MS degree in Technology Management at Marshall University, I am developing a report to help determine the costs for developing online courses in higher education. If you have developed an online course, would you please assist me with my research by completing the 16 question survey below by December 31, 1999.

The opinions you express here could assist other faculty and administrators in making decisions about developing online courses. **ALL RESPONSES WILL REMAIN CONFIDENTIAL AND RESULTS WILL BE REPORTED IN AGGREGATE ONLY.** If you have any questions, please feel free to contact me via e-mail (morgan@marshall.edu) or via phone at (304) 695-6469. **PLEASE** feel free to forward this survey to others who that you think may be interested in participating.



1. Name of the online course(s) that you have developed

2. Total number of credit hours for the course(s) above

3. For what type of institution was the course developed?
 Community College

4. What is your role at the University?
 Full-Time Faculty

5. In what form did you receive compensation for developing the course(s)?
 Stipend

6. If you received a stipend for development, what was the amount of that stipend?

7. If you received release time to develop your course(s), what was the amount of the release time that you received (number of credit hours)?

8. If you received release time, what is the normal rate of payment given to an adjunct, part-time faculty,

etc. to teach a course at your institution?

9. What technology tool was used to deliver the course(s) (WebCT, Blackboard's CourseInfo, TopClass, plain HTML, etc.)

10. On average, what percentage of your total work hours per week did you spend in developing your online course(s)?

11. Approximately how many weeks did you spend developing your course?

12. Of the time noted above, what percentages were spent on the following tasks (remember, this does NOT involve teaching the course, but only the development of the course)? The numbers should add up to 100%

- Learning how to use the specific software and/or hardware technologies in order to develop your course
- Online course syllabus development
- Course interaction development (E-mail, bulletin boards, etc.)
- Course learning activities development (quizzes, exams, self tests, assignments)
- Course content development (includes gathering instructional material, conversion, etc.)
- Development of multimedia content (video, audio, animations)
- Determining best pedagogical approaches for online course
- Designing layout of course
- Testing of course's technical components
- Copyright clearance

13. What do you feel is/are the greatest barrier(s) to developing an online course? Please feel free to elaborate.

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14. Would you be interested in receiving a copy of my paper once it is complete in May 2000?
 Yes No

15. Additional Comments?

16. OPTIONAL INFO:

Name

Institution

E-mail Address

May I contact you if I have further questions?

Yes No

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Appendix B

Teaching Online Courses Survey

As part of my Master's Capstone Project for the completion of an MS degree in Technology Management at Marshall University, I am developing a report to help determine the costs for developing online courses in higher education. If you have taught a course that students access through the World Wide Web, could you please assist me with my research by completing the 11 question survey below by February 10, 2000.

The opinions you express here could assist other faculty and administrators in making decisions about developing online courses. **ALL RESPONSES WILL REMAIN CONFIDENTIAL AND RESULTS WILL BE REPORTED IN AGGREGATE ONLY.** If you have any questions, please feel free to contact me via e-mail (brian.morgan@marshall.edu) or via phone at (304) 696-8489. **PLEASE** feel free to forward this survey to others who that you think may be interested in participating.

-
1. Name of the online course(s) taught and number of credit hours for each

2. For what type of institution was the course taught?

 Community College

3. In what form did you receive compensation for teaching the course(s)?

 Flat Rate Stipend

4. If you received a stipend for teaching, what was the amount of that stipend? Please indicate in your answer if this was a flat rate stipend or a per student enrolled stipend.

5. On average, what percentage of your total work hours per week did you spend in teaching your online course(s)? Please include the time spent interacting with students, answering course e-mail, and grading assignments and exams.

6. Compare the percentage indicated above to traditional courses that you have taught. Is this percentage of time higher, lower, or the same as the time you have spent teaching traditional courses. Also, indicate to what extent the percentages of time differ if they do.

7. What percentage of your time teaching was spent on the following tasks (remember, this ONLY involves teaching the course, not the development of the course)? The numbers should add up to 100%

Teaching the students how to access the course materials and progress through the course	<input type="text"/>
Reading and responding to course related e-mail	<input type="text"/>
Online course office hours	<input type="text"/>
Grading of assignments and/or exams	<input type="text"/>
Course Maintenance	<input type="text"/>
Participating in class interactions (chat, bulletin board, whiteboard, or any other type of synchronous communication)	<input type="text"/>
Other	<input type="text"/>

8. What do you feel is/are the greatest barrier(s) to teaching an online course? Please feel free to elaborate.

9. Would you be interested in receiving a copy of my paper once it is complete in May 2000?
 Yes No

10. Additional Comments?

11. OPTIONAL INFO:

Name	<input type="text"/>
Institution	<input type="text"/>
E-mail Address	<input type="text"/>
May I contact you if I have further questions?	<input type="radio"/> Yes <input type="radio"/> No

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Appendix C

Comments Received from Developing Online Courses Survey (names withheld)

Course(s) Taught:	World Wide Web for Educators
Credit Hours:	2
Type of Institution:	4Year
Your Role at the Inst.:	Pfac
Form of Compensation:	Stipend
Amount of Stipend:	\$2000
Technology Tool Used:	plain HTML
% of Time Spent:	
Num. Weeks to Devel:	
Time Spent Learning Tool:	0
Time Spent on Syllabus:	10
Time Spent-Course Int. Devel:	5
Time Spent-Learning Activities:	65
Time Spent-Content Devel.:	10
Time Spent-Multimedia Devel.:	5
Time Spent-Pedagogical Approach:	0
Time Spent-Designing Layout:	5
Time Spent-Testing Course:	10
Time Spent-Copyright Clearance:	0
Barriers:	Time

Direct technical assistance which was not available at my campus

Receive a Copy?: Yes

Additional Comments: I didn't complete the hours/weeks question because all work had to be done essentially as overload, beyond regular job responsibilities. A stipend doesn't even begin to cover the 80+ hours it took to do this course, and I had the advantage of already having strong web skills and knowledge of distance learning pedagogy. Other faculty members at my institution who received the \$2000 indicated that it took six months, and they still had to make major revisions after teaching their courses because things didn't work as planned.

Last year the University adopted eCollege as a delivery vehicle and forced all faculty to move to this environment. While it has some tools to help novices, it is a very inflexible environment for structures that don't fit its particular version of how to deliver a web course. For the innovators, this new requirement has been a disaster.

At the time I developed the course I was a computing administrator who also worked as a lecturer. I am now regular faculty and still teach the course I developed.

Course(s) Taught:	Introduction to Teaching Online
Credit Hours:	3
Type of Institution:	4Year
Your Role at the Inst.:	IT
Form of Compensation:	Stipend
Amount of Stipend:	\$1000
Technology Tool Used:	WebCT
% of Time Spent:	3 hours/week
Num. Weeks to Devel:	10
Time Spent Learning Tool:	20
Time Spent on Syllabus:	5
Time Spent-Course Int. Devel:	10
Time Spent-Learning Activities:	20
Time Spent-Content Devel.:	15

Time Spent-Multimedia Devel.: 5
 Time Spent-Pedagogical Approach: 10
 Time Spent-Designing Layout: 10
 Time Spent-Testing Course: 5
 Time Spent-Copyright Clearance: 0

Barriers: Lack of understanding on how to increase student interactivity. The course must be more than an electronic photocopy machine or an electronic correspondence course

I usually don't have time to create elaborate multimedia products nor do the students have the bandwidth to receive multimedia so most has to be creative text and still visuals.

How the teacher combines different learning/teaching styles into a cohesive whole is difficult.

Receive a Copy?: Yes

Additional Comments: Glad you are doing this. The results should be interesting. One variable I think you should look at is if the format of the class.

Many teachers are developing web based classes as supplemental to face to face. Also some have a face to face component but not pure online only.

Course(s) Taught: LS 610, LS 600

Credit Hours: 6

Type of Institution: 4Year

Your Role at the Inst.: Ffac

Form of Compensation: Stipend

Amount of Stipend: \$3000

Technology Tool Used: WebCT

% of Time Spent: 15

Num. Weeks to Devel: 10

Time Spent Learning Tool: 10

Time Spent on Syllabus: 5

Time Spent-Course Int. Devel: 5

Time Spent-Learning Activities: 20

Time Spent-Content Devel.: 20

Time Spent-Multimedia Devel.: 5

Time Spent-Pedagogical Approach: 20

Time Spent-Designing Layout: 10

Time Spent-Testing Course: 5

Time Spent-Copyright Clearance: 0

Barriers: Time to find supporting materials. Especially if no textbook is used with the course.

Receive a Copy?: Yes

Additional Comments: Question #3 did not permit the selection of a graduate school. While one might argue that this would be a 4-yr school, one might lose!

Course(s) Taught: advanced practice nursing: roles & issues

Credit Hours: 2

Type of Institution: 4Year

Your Role at the Inst.: Ffac

Form of Compensation: RegPay

Technology Tool Used: WebCT

% of Time Spent: 50

Num. Weeks to Devel: 10

Time Spent Learning Tool: 10

Time Spent on Syllabus: 10

Time Spent-Course Int. Devel: 10

Time Spent-Learning Activities: 10

Time Spent-Content Devel.: 25
 Time Spent-Multimedia Devel.: 5
 Time Spent-Pedagogical Approach: 10
 Time Spent-Designing Layout: 10
 Time Spent-Testing Course: 10
 Time Spent-Copyright Clearance: 0
 Barriers: lack of appreciation by administration about the need for paid professional support staff in the department as a way to assist faculty to teach this way and maintain a reasonable schedule. TAs/RAs who are students themselves CAN NOT be the support!
 Receive a Copy?: Yes
 Additional Comments: Glad you are looking at this!

Course(s) Taught: Technology for Teachers, Technology in the Classroom, Using Multimedia and the Internet in Science Education, Teaching Secondary Computing, IT and Information Systems, IT, Science and Society
 Credit Hours: 1/4 of a full-time 14-week semester load
 Type of Institution: 4Year
 Your Role at the Inst.: IT
 Form of Compensation: RegPay
 Technology Tool Used: Dreamweaver, Director Studio, WebCT
 % of Time Spent: 80
 Num. Weeks to Devel: 100
 Time Spent Learning Tool: 5
 Time Spent on Syllabus: 55
 Time Spent-Course Int. Devel: 0
 Time Spent-Learning Activities: 5
 Time Spent-Content Devel.: 5
 Time Spent-Multimedia Devel.: 10
 Time Spent-Pedagogical Approach: 5
 Time Spent-Designing Layout: 5
 Time Spent-Testing Course: 5
 Time Spent-Copyright Clearance: 5
 Barriers: Institutional bureaucracy -- demonstrating the need for more open and flexible delivery
 Receive a Copy?: Yes
 Additional Comments: Note that all of these courses are Postgraduate in a Centre that caters to (primarily distant) PG students (MS, doctorate) in science, math and technology education.

Course(s) Taught: Computer Mediated Communication Issues
 Credit Hours: 3
 Type of Institution: 4Year
 Your Role at the Inst.: Pfac
 Form of Compensation: Sipend
 Amount of Stipend: \$3000
 Technology Tool Used: TCP/IP stack
 % of Time Spent: 30
 Num. Weeks to Devel: 104
 Time Spent Learning Tool: 0
 Time Spent on Syllabus: 5
 Time Spent-Course Int. Devel: 10
 Time Spent-Learning Activities: 20
 Time Spent-Content Devel.: 40
 Time Spent-Multimedia Devel.: 0
 Time Spent-Pedagogical Approach: 10
 Time Spent-Designing Layout: 10
 Time Spent-Testing Course: 5

Time Spent-Copyright Clearance: 0
 Barriers: The course approval policy and process.
 Receive a Copy?: Yes
 Additional Comments:

Course(s) Taught: COM094
 Credit Hours: 3
 Type of Institution: CC
 Your Role at the Inst.: Ffac
 Form of Compensation: Stipend
 Amount of Stipend: \$1000
 Technology Tool Used: WebCT
 % of Time Spent: 6
 Num. Weeks to Devel: 11
 Time Spent Learning Tool: 5
 Time Spent on Syllabus: 5
 Time Spent-Course Int. Devel: 5
 Time Spent-Learning Activities: 5
 Time Spent-Content Devel.: 60
 Time Spent-Multimedia Devel.: 0
 Time Spent-Pedagogical Approach: 0
 Time Spent-Designing Layout: 15
 Time Spent-Testing Course: 5
 Time Spent-Copyright Clearance: 0
 Barriers: lack of release time; no other ideas. I had an easy time of it, the course is not demanding, nor does it require a lot of hi-tech gizmos.
 Receive a Copy?: Yes
 Additional Comments: I don't believe that online developmental level courses

Course(s) Taught: Education
 Credit Hours: 3
 Type of Institution: 4Year
 Your Role at the Inst.: Pfac
 Form of Compensation: RegPay
 Technology Tool Used: WebCT
 % of Time Spent: overtime
 Num. Weeks to Devel: 12
 Time Spent Learning Tool: 50
 Time Spent on Syllabus: 10
 Time Spent-Course Int. Devel: 0
 Time Spent-Learning Activities: 0
 Time Spent-Content Devel.: 30
 Time Spent-Multimedia Devel.: 0
 Time Spent-Pedagogical Approach: 0
 Time Spent-Designing Layout: 10
 Time Spent-Testing Course: 0
 Time Spent-Copyright Clearance: 0
 Barriers: having time to do the development - this is over and above my regular job
 Receive a Copy?: Yes
 Additional Comments: I couldn't tell you that I teach the course at a graduate level -more than 4 year - having the toime and then the mentoring or coaching when I needed it - also I do not teach the whole course on-line - probably 40%

Course(s) Taught: Business Statistics
 Credit Hours: 3

Type of Institution: 4Year
 Your Role at the Inst.: Ffac
 Form of Compensation: Stipend
 Amount of Stipend: \$3000
 Technology Tool Used: WebCT
 % of Time Spent: 33
 Num. Weeks to Devel: 12
 Time Spent Learning Tool: 0
 Time Spent on Syllabus: 5
 Time Spent-Course Int. Devel: 15
 Time Spent-Learning Activities: 5
 Time Spent-Content Devel.: 50
 Time Spent-Multimedia Devel.: 10
 Time Spent-Pedagogical Approach: 5
 Time Spent-Designing Layout: 5
 Time Spent-Testing Course: 5
 Time Spent-Copyright Clearance: 0
 Barriers: Level of compensation is too low. No recognition for tenure track. Low level of interaction and sharing in the development community
 Receive a Copy?: Yes
 Additional Comments:

Course(s) Taught: CSD 101E
 Credit Hours: 3
 Type of Institution: 4Year
 Your Role at the Inst.: Ffac
 Form of Compensation: Stipend
 Amount of Stipend: \$3000
 Technology Tool Used: WebCT
 % of Time Spent: 6 hrs/week
 Num. Weeks to Devel: 14
 Time Spent Learning Tool: 10
 Time Spent on Syllabus: 1
 Time Spent-Course Int. Devel: 14
 Time Spent-Learning Activities: 20
 Time Spent-Content Devel.: 25
 Time Spent-Multimedia Devel.: 5
 Time Spent-Pedagogical Approach: 3
 Time Spent-Designing Layout: 10
 Time Spent-Testing Course: 10
 Time Spent-Copyright Clearance: 2
 Barriers: To me there were none since I have some background in using WebCT and other needed Tools. Also my course did not include advanced multimedia components. Mainly HTML documents and plain chart drawings.

If the course had major multimedia component, it would take alot of time to develo such component.

Receive a Copy?: Yes
 Additional Comments: Are you going to collcet this data nd presente it in recommondation format for future developers?

Course(s) Taught: Finite Mathematics
 Credit Hours: 3
 Type of Institution: CC
 Your Role at the Inst.: Ffac
 Form of Compensation: RegPay
 Technology Tool Used: WebCT

% of Time Spent: 40
 Num. Weeks to Devel: 14
 Time Spent Learning Tool: 5
 Time Spent on Syllabus: 2
 Time Spent-Course Int. Devel: 3
 Time Spent-Learning Activities: 70
 Time Spent-Content Devel.: 5
 Time Spent-Multimedia Devel.: 0
 Time Spent-Pedagogical Approach: 2
 Time Spent-Designing Layout: 3
 Time Spent-Testing Course: 10
 Time Spent-Copyright Clearance: 0
 Barriers: Lack of support. Very inefficient typing math equations. No way to type math in 'real-time' chats with students.
 Receive a Copy?: Yes
 Additional Comments: Also doing doctoral research on Evaluating Web courses. Do you have any good sources?

Course(s) Taught: Computer Literacy, Microcomputer Applications I, and II, Software and Hardware Concepts, Marketing and Human Relations
 Credit Hours: 18
 Type of Institution: 4Year
 Your Role at the Inst.: ID
 Form of Compensation: Stipend
 Amount of Stipend: \$1200/hour
 Release Time Salary: same as onground class
 Amount of Release Time: one semester per class
 Technology Tool Used: CyberClass and Embranet
 % of Time Spent: 10
 Num. Weeks to Devel: 15
 Time Spent Learning Tool: 10
 Time Spent on Syllabus: 5
 Time Spent-Course Int. Devel: 5
 Time Spent-Learning Activities: 20
 Time Spent-Content Devel.: 25
 Time Spent-Multimedia Devel.: 10
 Time Spent-Pedagogical Approach: 5
 Time Spent-Designing Layout: 10
 Time Spent-Testing Course: 5
 Time Spent-Copyright Clearance: 5
 Barriers: Overcoming instructor computer incompetancy; establishing early and reliable communication with students.
 Receive a Copy?: Yes
 Additional Comments:

Course(s) Taught:
 Credit Hours: 3
 Type of Institution: 4Year
 Your Role at the Inst.: IT
 Form of Compensation: RegPay
 Technology Tool Used: EduPris
 % of Time Spent: 25
 Num. Weeks to Devel: 15
 Time Spent Learning Tool: 3
 Time Spent on Syllabus: 2
 Time Spent-Course Int. Devel: 5

Time Spent-Learning Activities: 20
 Time Spent-Content Devel.: 35
 Time Spent-Multimedia Devel.: 10
 Time Spent-Pedagogical Approach: 5
 Time Spent-Designing Layout: 10
 Time Spent-Testing Course: 5
 Time Spent-Copyright Clearance: 5
 Barriers: incentives for developing/supporting/teaching online courses are not built in performance/tenure review process; concerns relating to ownership of course and course content
 Receive a Copy?: Yes
 Additional Comments:

Course(s) Taught: Leadership Studies 500; LS535; LS630; LS645; LS775
 Credit Hours: 15
 Type of Institution: Graduate
 Your Role at the Inst.: Ffac
 Form of Compensation: Stipend
 Amount of Stipend: \$3000/course
 Technology Tool Used: WebCT
 % of Time Spent: 60
 Num. Weeks to Devel: 15
 Time Spent Learning Tool: 15
 Time Spent on Syllabus: 5
 Time Spent-Course Int. Devel: 10
 Time Spent-Learning Activities: 15
 Time Spent-Content Devel.: 20
 Time Spent-Multimedia Devel.: 5
 Time Spent-Pedagogical Approach: 15
 Time Spent-Designing Layout: 10
 Time Spent-Testing Course: 2.5
 Time Spent-Copyright Clearance: 2.5
 Barriers: 1) The labor-intensive character of online course development is likely the greatest barrier. It takes an extraordinary amount of time to design a course for electronic delivery. 2) The content development effort is sometimes exacerbated by unnecessarily arcane technical platforms. While WebCT gets increasingly simpler to use as a design platform, its earlier versions weren't particularly user-friendly. It's imperative that learning how to use the software be secondary to the epistemological issues faculty need to address in order to ensure course quality.
 Receive a Copy?: Yes
 Additional Comments:

Course(s) Taught: Ethics
 Credit Hours: 3
 Type of Institution: CC
 Your Role at the Inst.: Ffac
 Form of Compensation: Stipend
 Amount of Stipend: \$1500
 Technology Tool Used: WebCT
 % of Time Spent: 25
 Num. Weeks to Devel: 16
 Time Spent Learning Tool: 15
 Time Spent on Syllabus: 5
 Time Spent-Course Int. Devel: 10
 Time Spent-Learning Activities: 20
 Time Spent-Content Devel.: 40
 Time Spent-Multimedia Devel.: 0
 Time Spent-Pedagogical Approach: 3

Time Spent-Designing Layout: 5
 Time Spent-Testing Course: 2
 Time Spent-Copyright Clearance: 0
 Barriers: The "conceptual shift" to change how one teaches was probably the hardest but the least linked to particular time; this "theme" went underneath all of the things above.
 The next greatest barrier I think is "RE"-development; I am now teaching an on-line course for the first time, and I will change about 30% of the course design for next semester based on my experience teaching it the first time.
 Receive a Copy?: Yes
 Additional Comments:

Course(s) Taught: Business Computer Systems
 Credit Hours: 3
 Type of Institution: CC
 Your Role at the Inst.: Ffac
 Form of Compensation: Release
 Release Time Salary: 565
 Amount of Release Time: 3
 Technology Tool Used: WebCT and HTML
 % of Time Spent: 10
 Num. Weeks to Devel: 16
 Time Spent Learning Tool: 0
 Time Spent on Syllabus: 5
 Time Spent-Course Int. Devel: 10
 Time Spent-Learning Activities: 30
 Time Spent-Content Devel.: 20
 Time Spent-Multimedia Devel.: 0
 Time Spent-Pedagogical Approach: 20
 Time Spent-Designing Layout: 10
 Time Spent-Testing Course: 5
 Time Spent-Copyright Clearance: 0
 Barriers: Quiz /test security
 Receive a Copy?: Yes
 Additional Comments:

Course(s) Taught: Criminal Code, Principles of Ethical Reasoning
 Credit Hours: 3
 Type of Institution: CC
 Your Role at the Inst.: Ffac
 Form of Compensation: Stipend
 Amount of Stipend: \$8000 Cdn
 Technology Tool Used: WebCT
 % of Time Spent: 50
 Num. Weeks to Devel: 16
 Time Spent Learning Tool: 25
 Time Spent on Syllabus: 5
 Time Spent-Course Int. Devel: 5
 Time Spent-Learning Activities: 15
 Time Spent-Content Devel.: 25
 Time Spent-Multimedia Devel.: 10
 Time Spent-Pedagogical Approach: 5
 Time Spent-Designing Layout: 5
 Time Spent-Testing Course: 5
 Time Spent-Copyright Clearance: 0
 Barriers: Learning how to use the software
 Receive a Copy?: No
 Additional Comments:

Course(s) Taught:	Introduction to Project Based Learning
Credit Hours:	3
Type of Institution:	4Year
Your Role at the Inst.:	Cons
Form of Compensation:	RegPay
Technology Tool Used:	WebCT
% of Time Spent:	60
Num. Weeks to Devel:	16
Time Spent Learning Tool:	40
Time Spent on Syllabus:	5
Time Spent-Course Int. Devel:	5
Time Spent-Learning Activities:	5
Time Spent-Content Devel.:	30
Time Spent-Multimedia Devel.:	0
Time Spent-Pedagogical Approach:	5
Time Spent-Designing Layout:	5
Time Spent-Testing Course:	5
Time Spent-Copyright Clearance:	0
Barriers:	Getting the instructional design "just right" in order to encourage / stimulate interactivity.
Receive a Copy?:	Yes
Additional Comments:	

Course(s) Taught:	Principles of Biology I
Credit Hours:	4
Type of Institution:	CC
Your Role at the Inst.:	Ffac
Form of Compensation:	Release
Release Time Salary:	\$400/hour
Amount of Release Time:	3 hours
Technology Tool Used:	VAX notes, email, plain HTML, MOO
% of Time Spent:	4 hours per week
Num. Weeks to Devel:	16
Time Spent Learning Tool:	10
Time Spent on Syllabus:	5
Time Spent-Course Int. Devel:	20
Time Spent-Learning Activities:	20
Time Spent-Content Devel.:	10
Time Spent-Multimedia Devel.:	10
Time Spent-Pedagogical Approach:	5
Time Spent-Designing Layout:	10
Time Spent-Testing Course:	10
Time Spent-Copyright Clearance:	0
Barriers:	time and motivation first; software and technology applications second
Receive a Copy?:	Yes
Additional Comments:	

Course(s) Taught:	Crop Growth and Climate
Credit Hours:	2
Type of Institution:	4Year
Your Role at the Inst.:	Ffac
Form of Compensation:	RegPay
Technology Tool Used:	WebCT, HTML

% of Time Spent: 50
 Num. Weeks to Devel: 16
 Time Spent Learning Tool: 5
 Time Spent on Syllabus: 5
 Time Spent-Course Int. Devel: 10
 Time Spent-Learning Activities: 10
 Time Spent-Content Devel.: 35
 Time Spent-Multimedia Devel.: 25
 Time Spent-Pedagogical Approach: 5
 Time Spent-Designing Layout: 5
 Time Spent-Testing Course: 0
 Time Spent-Copyright Clearance: 0
 Barriers: Time, money, reward for developing course
 Receive a Copy?: Yes
 Additional Comments:

Course(s) Taught: Nuclear Systems
 Credit Hours: 3
 Type of Institution: Tech
 Your Role at the Inst.: Ffac
 Form of Compensation: Stipend
 Amount of Stipend: \$5000
 Technology Tool Used: CD-ROM (HTML)
 % of Time Spent: 150 hours total
 Num. Weeks to Devel: 16
 Time Spent Learning Tool: 10
 Time Spent on Syllabus: 5
 Time Spent-Course Int. Devel: 20
 Time Spent-Learning Activities: done
 Time Spent-Content Devel.: 15
 Time Spent-Multimedia Devel.: 20
 Time Spent-Pedagogical Approach: androgoricl was done
 Time Spent-Designing Layout: 10
 Time Spent-Testing Course: 15
 Time Spent-Copyright Clearance: 5
 Barriers: The time and the hot buttons interaction, to be sure everything has a next or it is complete
 Receive a Copy?: Yes
 Additional Comments: I answered this as the supervising dean for a faculty member doing the C D Rom delivery. We at LTC are very interested in your stude.

Course(s) Taught: Human Geography, Economic Geography
 Credit Hours: 6
 Type of Institution: 4Year
 Your Role at the Inst.: Pfac
 Form of Compensation: RegPay
 Technology Tool Used: WebCT
 % of Time Spent: 10
 Num. Weeks to Devel: 2
 Time Spent Learning Tool: 15
 Time Spent on Syllabus: 5
 Time Spent-Course Int. Devel: 10
 Time Spent-Learning Activities: 25
 Time Spent-Content Devel.: 25
 Time Spent-Multimedia Devel.: 0
 Time Spent-Pedagogical Approach: 5

Time Spent-Designing Layout: 5
 Time Spent-Testing Course: 10
 Time Spent-Copyright Clearance: 0
 Barriers: ariety of students' experiences with computers (95% pick it up quite quickly; I spend 80% of my time with the other 5%), and differences in access to computers (some have cable modem access at home, others must wait for open slots in the dorm's computer lab). Learning curve -- WebCT's help files are more useful if you already have a knowledge of the product. They're less helpful when you're starting from ground zero.
 Receive a Copy?: Yes
 Additional Comments: It was stated during an orientation session that WebCT won't save you a lot of time, but that it does help you to present course material and communicate better with the students. I have indeed found this to be the case. Nearly all the material I put on WebCT is material I would have prepared for lectures anyway. The online quizzes have saved time (or added time, since I may not have had chapter exercises in the first place without this functionality). The main additional time/cost is that related to learning the capabilities of WebCT, to transferring/uploading files (files which I would have prepared anyway - the process can take longer in WebCT than simply posting to a web site), and to tech support for students who have trouble adjusting to the system. I do also communicate more with my students that I would have otherwise.

Course(s) Taught: World Civilizations since 1500
 Credit Hours: 3
 Type of Institution: 4Year
 Your Role at the Inst.: Ffac
 Form of Compensation: Stipend
 Amount of Stipend: \$2500
 Technology Tool Used: plain HTML
 % of Time Spent: 8-10
 Num. Weeks to Devel: 2 years
 Time Spent Learning Tool: 0
 Time Spent on Syllabus: 0
 Time Spent-Course Int. Devel: 0
 Time Spent-Learning Activities: 0
 Time Spent-Content Devel.: 80
 Time Spent-Multimedia Devel.: 20
 Time Spent-Pedagogical Approach: 0
 Time Spent-Designing Layout: 0
 Time Spent-Testing Course: 0
 Time Spent-Copyright Clearance: 0
 Barriers: Not enough to time to develop course with other things I am responsible for. It isn't really an interactive course, though I am slowly moving in that direction when I can find the time.
 Receive a Copy?: No
 Additional Comments:

Course(s) Taught: Finance tutorials, Business economics and Accounting self study modules
 Credit Hours: 3 each
 Type of Institution: 4Year
 Your Role at the Inst.: ID
 Form of Compensation: Stipend
 Amount of Stipend: \$10,000
 Technology Tool Used: FrontPage/Internet
 % of Time Spent: 25
 Num. Weeks to Devel: 20
 Time Spent Learning Tool: 5
 Time Spent on Syllabus: 5
 Time Spent-Course Int. Devel: 0
 Time Spent-Learning Activities: 5
 Time Spent-Content Devel.: 50

Time Spent-Multimedia Devel.: 5
 Time Spent-Pedagogical Approach: 5
 Time Spent-Designing Layout: 5
 Time Spent-Testing Course: 15
 Time Spent-Copyright Clearance: 5
 Barriers: 1. overcoming staff resistance and ill formed fears
 2. hiring dependable subject matter experts who have sufficient release time to write modules for on line presentation.
 Receive a Copy?: Yes
 Additional Comments: to save money, grad students are often hired at greatly reduced costs compared to hiring professional staff. However this leads to problems of insufficient time on task. Students have other priorities and getting a course on line according to timelines isn't one of them. While they work cheap, they also work slow.....

Course(s) Taught: Class Webs
 Credit Hours: 10-3hours credit classes
 Type of Institution: 4Year
 Your Role at the Inst.: ITPro
 Form of Compensation: RegPay
 Technology Tool Used: HTML-FrontPage
 % of Time Spent: 10
 Num. Weeks to Devel: 20
 Time Spent Learning Tool: 20
 Time Spent on Syllabus: 10
 Time Spent-Course Int. Devel: 10
 Time Spent-Learning Activities: 25
 Time Spent-Content Devel.: 18
 Time Spent-Multimedia Devel.: 0
 Time Spent-Pedagogical Approach: 2
 Time Spent-Designing Layout: 10
 Time Spent-Testing Course: 3
 Time Spent-Copyright Clearance: 2
 Barriers: Getting Administration to under stand the difference between teaching on line and in the classroom
 Receive a Copy?: No
 Additional Comments:

Course(s) Taught: MIS 410E Telecommunications, sole, Principles of Finance, partnered, Principles of Management, Principles of Marketing, Electronic Commerce - Graduate Top 10-Techno MBA school in the Country.
 Credit Hours: 15
 Type of Institution: 4Year
 Your Role at the Inst.: Ffac
 Form of Compensation: Stipend
 Amount of Stipend: \$3000/course
 Technology Tool Used: WebCT, HTML
 % of Time Spent: 15-20
 Num. Weeks to Devel: 20
 Time Spent Learning Tool: 20
 Time Spent on Syllabus: 5
 Time Spent-Course Int. Devel: 5
 Time Spent-Learning Activities: 10
 Time Spent-Content Devel.: 30
 Time Spent-Multimedia Devel.: 0
 Time Spent-Pedagogical Approach: 0
 Time Spent-Designing Layout: 10

Time Spent-Testing Course: 15
 Time Spent-Copyright Clearance: 5
 Barriers: Lack of equitable rewards
 Receive a Copy?: Yes
 Additional Comments:

Course(s) Taught: ost 2810--Creating Web Pages, OST 1001--Word I CBT, OST 1002--Word II CBT, OST 1003--Excel I CBT, OST 1004--Excel II CBT, OST 1006--PowerPoint CBT, OST 1007--Access I CBT, OST 1008--Access II CBT, OST 1010--Outlook CBT, OST 1011--FrontPage/IE CBT, OST 2910--Medical Terminology, HSP 2310--Quick Serve Operations (in progress)
 Credit Hours: 3 hr--all but the OST 1001-1011 CBT series. These are 1 hour (semester hours)
 Type of Institution: CC
 Your Role at the Inst.: Ffac
 Form of Compensation: Release
 Release Time Salary: 3 sem hrs/course except for the 1001-1011 series. This series received 9 sem hrs release time
 Amount of Release Time: Depends on degree of adjunct--usually MS level at \$450/sem hour
 Technology Tool Used: WebCT
 % of Time Spent: 40
 Num. Weeks to Devel: 20 (entire set)
 Time Spent Learning Tool: 15
 Time Spent on Syllabus: 5
 Time Spent-Course Int. Devel: 2
 Time Spent-Learning Activities: 20
 Time Spent-Content Devel.: 20
 Time Spent-Multimedia Devel.: 3
 Time Spent-Pedagogical Approach: 10
 Time Spent-Designing Layout: 10
 Time Spent-Testing Course: 15
 Time Spent-Copyright Clearance: 0
 Barriers: Not enough time nor technical support. And once the course is offered, not enough support in terms of time to teach it. It takes at least 1.5 the amount of work to run a Web class as a traditional class.
 Receive a Copy?: Yes
 Additional Comments:

Course(s) Taught: Introduction to Oil Spill Prevention and Response
 Credit Hours: 4
 Type of Institution: CC
 Your Role at the Inst.: Cons
 Form of Compensation: Stipend
 Amount of Stipend: \$85,000
 Technology Tool Used: WebCT
 % of Time Spent: 40
 Num. Weeks to Devel: 24
 Time Spent Learning Tool: 10
 Time Spent on Syllabus: 15
 Time Spent-Course Int. Devel: 5
 Time Spent-Learning Activities: 5
 Time Spent-Content Devel.: 20
 Time Spent-Multimedia Devel.: 20
 Time Spent-Pedagogical Approach: 10
 Time Spent-Designing Layout: 5
 Time Spent-Testing Course: 10
 Time Spent-Copyright Clearance: 0

Barriers: Determining and maintaining the scope of the project. Following the initial design when developing. Too often, reviewers want to make content changes AFTER the media has been developed. Thorough, in-depth reviews of content prior to development of media should minimize this practice.

Receive a Copy?: Yes

Additional Comments:

Course(s) Taught: Government Publication

Credit Hours: 3

Type of Institution: 4Year

Your Role at the Inst.: Pfac

Form of Compensation: Stipend

Amount of Stipend: \$1500

Technology Tool Used: CourseInfo

% of Time Spent: 10

Num. Weeks to Devel: 26

Time Spent Learning Tool: 5

Time Spent on Syllabus: 5

Time Spent-Course Int. Devel: 0

Time Spent-Learning Activities: 10

Time Spent-Content Devel.: 75

Time Spent-Multimedia Devel.: 0

Time Spent-Pedagogical Approach: 0

Time Spent-Designing Layout: 0

Time Spent-Testing Course: 5

Time Spent-Copyright Clearance: 0

Barriers:

Receive a Copy?: Yes

Additional Comments:

Course(s) Taught: History 103 Twentieth Century World

Credit Hours: 3

Type of Institution: 4Year

Your Role at the Inst.: Ffac

Form of Compensation: Release

Amount of Release Time: \$1500

Technology Tool Used: WebCT

% of Time Spent: 30 hrs/week

Num. Weeks to Devel: 28

Time Spent Learning Tool: 10

Time Spent on Syllabus: 5

Time Spent-Course Int. Devel: 0

Time Spent-Learning Activities: 10

Time Spent-Content Devel.: 25

Time Spent-Multimedia Devel.: 35

Time Spent-Pedagogical Approach: 10

Time Spent-Designing Layout: 5

Time Spent-Testing Course: 0

Time Spent-Copyright Clearance: 0

Barriers: Need for an assistant who is computer literate and who can help you when you run into trouble and who can handle the technical components of a course.

Receive a Copy?: Yes

Additional Comments: It was one of the more exciting things I have done in my teaching in over 30 years. I also learned the enormous power of the internet in delivering distance education.

Course(s) Taught: Human Development

Credit Hours: 3
 Type of Institution: Graduate
 Your Role at the Inst.: Ffac
 Form of Compensation: Stipend
 Amount of Stipend: \$1500
 Technology Tool Used: WebCT
 % of Time Spent: 10
 Num. Weeks to Devel: 3
 Time Spent Learning Tool: 15
 Time Spent on Syllabus: 5
 Time Spent-Course Int. Devel: 5
 Time Spent-Learning Activities: 15
 Time Spent-Content Devel.: 15
 Time Spent-Multimedia Devel.: 0
 Time Spent-Pedagogical Approach: 10
 Time Spent-Designing Layout: 5
 Time Spent-Testing Course: 5
 Time Spent-Copyright Clearance: 0
 Barriers: First, on above, I had a great deal of assistance from a fellow faculty member who serves as mentor for those of us at initial stage of developing on line courses. I feel that the greatest barrier is to figure out ways to develop a learning community when you don't meet face to face and the time involved in learning all of the technical stuff needed to develop and support the course itself. It takes a lot of time and commitment.
 Receive a Copy?: No
 Additional Comments: Good luck with your survey

Course(s) Taught: Multimedia for Educators
 Credit Hours: 3
 Type of Institution: Graduate
 Your Role at the Inst.: Ffac
 Form of Compensation: Release
 Release Time Salary: 3/semester for two semesters
 Technology Tool Used: WebCT
 % of Time Spent: Over 10 hours/week
 Num. Weeks to Devel: 3 semesters
 Time Spent Learning Tool: 5
 Time Spent on Syllabus: 5
 Time Spent-Course Int. Devel: 5
 Time Spent-Learning Activities: 10
 Time Spent-Content Devel.: 40
 Time Spent-Multimedia Devel.: 0
 Time Spent-Pedagogical Approach: 10
 Time Spent-Designing Layout: 20
 Time Spent-Testing Course: 5
 Time Spent-Copyright Clearance: 0
 Barriers: Time constraints. Load of other duties. No award system in place for developing the online courses towards tenure-track consideration.
 Receive a Copy?: Yes
 Additional Comments: Considering the amount of time that I have spent developing the online course, I have not received documentation that I will obtain significant consideration for this course development in my tenure-track review.

Course(s) Taught: Electrical Machines
 Credit Hours: 4
 Type of Institution: 2Year
 Your Role at the Inst.: ID
 Form of Compensation: RegPay

Technology Tool Used: HTML
 % of Time Spent: 20
 Num. Weeks to Devel: 30
 Time Spent Learning Tool: 20
 Time Spent on Syllabus: 5
 Time Spent-Course Int. Devel: 20
 Time Spent-Learning Activities: 5
 Time Spent-Content Devel.: 20
 Time Spent-Multimedia Devel.: 10
 Time Spent-Pedagogical Approach: 5
 Time Spent-Designing Layout: 5
 Time Spent-Testing Course: 10
 Time Spent-Copyright Clearance: Clear
 Barriers: Getting content experts (professors) to focus on learner-centered interactions that require thinking and problem-solving rather than just reading and taking content-based quizzes. Another barrier is the time and energy it takes to design and develop highly interactive simulations.
 Receive a Copy?: Yes
 Additional Comments: Too many times, professors use on-line courses like traditional courses, which simply dispense information (lecture notes, assignments) rather than as a collaborative and generative learning tool.

Course(s) Taught: Advanced Accounting, Contemporary Accounting Theory, Intermediate Accounting II, Cost Accounting, Managerial Accounting
 Credit Hours: 15
 Type of Institution: 4Year
 Your Role at the Inst.: Ffac
 Form of Compensation: RegPay
 Technology Tool Used: WebCT
 % of Time Spent: 50
 Num. Weeks to Devel: 30
 Time Spent Learning Tool: 5
 Time Spent on Syllabus: 5
 Time Spent-Course Int. Devel: 10
 Time Spent-Learning Activities: 10
 Time Spent-Content Devel.: 25
 Time Spent-Multimedia Devel.: 10
 Time Spent-Pedagogical Approach: 10
 Time Spent-Designing Layout: 20
 Time Spent-Testing Course: 5
 Time Spent-Copyright Clearance: 0
 Barriers: The lack of technical knowledge on the part of faculty.
 Receive a Copy?: Yes
 Additional Comments:

Course(s) Taught: Economic History
 Credit Hours: 3
 Type of Institution: CC
 Your Role at the Inst.: Pfac
 Form of Compensation: RegPay
 Technology Tool Used: Asymetrix Toolbook 4.0
 % of Time Spent: summers, early retirement sabbatical
 Num. Weeks to Devel: 32
 Time Spent Learning Tool: 20
 Time Spent on Syllabus: 0
 Time Spent-Course Int. Devel: 5
 Time Spent-Learning Activities: 15
 Time Spent-Content Devel.: 30

Time Spent-Multimedia Devel.: 0
 Time Spent-Pedagogical Approach: 5
 Time Spent-Designing Layout: 20
 Time Spent-Testing Course: 5
 Time Spent-Copyright Clearance: 0
 Barriers: 1. Lack of technical help. In our college interested faculty design their own courses because of internal interest and challenge. There is little face to face help in course design. This results in far too much time spent on technicalities that could be spent on pedagogy.
 2. Weak college support, for the above reason, inability to generate enough demand for courses. Result, faculty find themselves teaching tiny course sections, and are unable to generate demand on their own.
 3. Cost to faculty considerable: training manuals, training at own expense, ISP access at own expense, etc. I will never recoup a portion of my out-of-pocket expenses.
 4. College requirement that DL courses fit most of the face-to-face course structure, which doesn't fit well.
 Receive a Copy?: Yes
 Additional Comments: I did my own training (at my own expense) at least two years before the college sense a need. At my own expense. The Income Tax Act can be used to defray some costs. My course in Economic History developed initially for self-study in the lab as support for my classroom teaching. It was then easy, using WebCT to transfer the materials for DL purposes. The interactive materials run on the college server which links student's computer to the server using Citrix Winframe. My Political Geography course was easier; I transferred my textbook materials onto 350 web pages and used the rest of WebCT to make it a better course.

Course(s) Taught: Education (EDB) 463: Media and Pedagogy
 Credit Hours: 3
 Type of Institution: 4Year
 Your Role at the Inst.: IT
 Form of Compensation: RegPay
 Technology Tool Used: WebCT
 % of Time Spent: 10
 Num. Weeks to Devel: 4
 Time Spent Learning Tool: 0
 Time Spent on Syllabus: 5
 Time Spent-Course Int. Devel: 35
 Time Spent-Learning Activities: 25
 Time Spent-Content Devel.: 20
 Time Spent-Multimedia Devel.: 0
 Time Spent-Pedagogical Approach: 10
 Time Spent-Designing Layout: 4
 Time Spent-Testing Course: 1
 Time Spent-Copyright Clearance: 0
 Barriers: Time consuming nature of developing the more complex parts of an online courses e.g. online quizzes, video clips
 Receive a Copy?: Yes
 Additional Comments: Our institution tends to pay on average 1 section release for the development of online courses offered to distance education students but otherwise the use of an online course for students scheduled in campus based courses (as the above course was) is an "off the side of your desk activity". Your percentages would vary by the level of technical skill and technical support the faculty member had. They would also vary by the level of pedagogical knowledge and skill of the faculty member as well as their pedagogical orientation.

Course(s) Taught: Research and Writing
 Credit Hours: 3
 Type of Institution: Graduate
 Your Role at the Inst.: Ffac
 Form of Compensation: Stipend
 Amount of Stipend: \$2000
 Technology Tool Used: WebCT

% of Time Spent: 10
 Num. Weeks to Devel: 4
 Time Spent Learning Tool: 60
 Time Spent on Syllabus: 5
 Time Spent-Course Int. Devel: 10
 Time Spent-Learning Activities: 15
 Time Spent-Content Devel.: 5
 Time Spent-Multimedia Devel.: 0
 Time Spent-Pedagogical Approach: 0
 Time Spent-Designing Layout: 5
 Time Spent-Testing Course: 0
 Time Spent-Copyright Clearance: 0
 Barriers: My problem was time to develop certain strategies, such as multimedia components, really laying out the course for a nice even flow, and incorporating unique and interesting activities.
 Receive a Copy?: Yes
 Additional Comments: Fortunately, Brian has answered questions quickly and Sherry Ritter has been available lately for help. I would like to spend more time on the pedagogy and less time on the technical aspects, meaning I would like to be able to turn over the technical aspects of the course to someone. At the same time, I enjoy using Web CT. It has become more user friendly.

Course(s) Taught: Instructional Technology
 Credit Hours: 3
 Type of Institution: 4Year
 Your Role at the Inst.: Ffac
 Form of Compensation: Stipend
 Technology Tool Used: MSFrontPage
 % of Time Spent: 10
 Num. Weeks to Devel: 4
 Time Spent Learning Tool: 60
 Time Spent on Syllabus: 0
 Time Spent-Course Int. Devel: 0
 Time Spent-Learning Activities: 10
 Time Spent-Content Devel.: 5
 Time Spent-Multimedia Devel.: 0
 Time Spent-Pedagogical Approach: 5
 Time Spent-Designing Layout: 10
 Time Spent-Testing Course: 10
 Time Spent-Copyright Clearance: 0
 Barriers: The time that it takes to "package" the course.
 Receive a Copy?: Yes
 Additional Comments: You didn't have the option in the Number 5 question for NO compensation. I had to create my course over the summer and received no financial support for the process. The software I used was part of a grant I received. I

Course(s) Taught: Civil Rights and Social Justice
 Credit Hours: 3
 Type of Institution: Graduate
 Your Role at the Inst.: Ffac
 Form of Compensation: RegPay
 Technology Tool Used: Nicenet.org
 % of Time Spent: 30
 Num. Weeks to Devel: 4
 Time Spent Learning Tool: 3
 Time Spent on Syllabus: 25
 Time Spent-Course Int. Devel: 10
 Time Spent-Learning Activities: 3

Time Spent-Content Devel.: 25
 Time Spent-Multimedia Devel.: 5
 Time Spent-Pedagogical Approach: 10
 Time Spent-Designing Layout: 15
 Time Spent-Testing Course: 3
 Time Spent-Copyright Clearance: 1
 Barriers: I need more time and more technical support. I know what I want to do but we don't have a team to help us so we have to develop our courses alone.
 Receive a Copy?: Yes
 Additional Comments:

Course(s) Taught: Organizational Dynamics and Financial Management for Nurse Administrators
 Credit Hours: 6
 Type of Institution: 4Year
 Your Role at the Inst.: Ffac
 Form of Compensation: Stipend
 Amount of Stipend: \$1500/course
 Technology Tool Used: WebCT
 % of Time Spent: 180 hours
 Num. Weeks to Devel: 4.5
 Time Spent Learning Tool: 20
 Time Spent on Syllabus: 10
 Time Spent-Course Int. Devel: 5
 Time Spent-Learning Activities: 5
 Time Spent-Content Devel.: 20
 Time Spent-Multimedia Devel.: 5
 Time Spent-Pedagogical Approach: 5
 Time Spent-Designing Layout: 10
 Time Spent-Testing Course: 10
 Time Spent-Copyright Clearance: 10
 Barriers: Learning the system...however, I worked with Sherry Ritter and she was wonderful to help me. Learning the system...however, I worked with Sherry Ritter and she was great to help me learn this. Brian, these two courses are graduate level courses.
 Receive a Copy?: Yes
 Additional Comments: I plan to develop two more courses that will include T segments.

Course(s) Taught: American Legal History
 Credit Hours: 3
 Type of Institution: 4Year
 Your Role at the Inst.: Ffac
 Form of Compensation: Stipend
 Amount of Stipend: \$3000
 Technology Tool Used: WebCT
 % of Time Spent: 20
 Num. Weeks to Devel: 40
 Time Spent Learning Tool: 2
 Time Spent on Syllabus: 1
 Time Spent-Course Int. Devel: 2
 Time Spent-Learning Activities: 10
 Time Spent-Content Devel.: 55
 Time Spent-Multimedia Devel.: 15
 Time Spent-Pedagogical Approach: 5
 Time Spent-Designing Layout: 5
 Time Spent-Testing Course: 3
 Time Spent-Copyright Clearance: 2

Barriers: Instructors with minimal computer experience will have a steep learning curve if they are going to offer anything beyond straight text.
 Receive a Copy?: Yes
 Additional Comments:

Course(s) Taught: Crop Growth and Development; Crop Improvement; Crop Management and Ecology (in dev)
 Credit Hours: 2 each
 Type of Institution: 4Year
 Your Role at the Inst.: Ffac
 Form of Compensation: RegPay
 Technology Tool Used: WebCT
 % of Time Spent: 90
 Num. Weeks to Devel: 40
 Time Spent Learning Tool: support staff
 Time Spent on Syllabus: 1
 Time Spent-Course Int. Devel: 1
 Time Spent-Learning Activities: 30
 Time Spent-Content Devel.: 55
 Time Spent-Multimedia Devel.: 10
 Time Spent-Pedagogical Approach: 1
 Time Spent-Designing Layout: staff
 Time Spent-Testing Course: 1
 Time Spent-Copyright Clearance: staff

Barriers: TIME!!!! I have worked extraordinarily long weeks for 1.5 years (60 hrs/week) and have a GREAT support staff that converts my Word doc and sketches into web pages and does all the graphics, animations, Authorware, Quicktime movies, etc. So I don't even have to learn that part. We are collaborating with folks in the College of Ed and they deal with the pedagogical part. I estimate that it takes a minimum of 500 hours per credit hour for development (assuming the course is based on an existing course)--about double that for courses that are entirely new!!!! The teaching part is also VERY time consuming, averaging .5 hours/week/student--- answering e-mail, phone calls, moderating the discussion board, grading assignments, writing and grading exams (1 midterm + final).. The 3 courses listed are all graduate level and I have students from all over the US in these courses. My appt is 75% teaching, 25% research and I teach on-campus too. So, the time crunch is severe and on-going.

Receive a Copy?: Yes
 Additional Comments: A support staff to deal with the technical aspects is essential (but expensive)!!!!

Course(s) Taught: COM095E (re-do) Developmental Writing
 Credit Hours: 3
 Type of Institution: CC
 Your Role at the Inst.: Pfac
 Form of Compensation: Stipend
 Amount of Stipend: maybe
 Technology Tool Used: WebCT
 % of Time Spent: 25
 Num. Weeks to Devel: 5
 Time Spent Learning Tool: 25
 Time Spent on Syllabus: 10
 Time Spent-Course Int. Devel: 0
 Time Spent-Learning Activities: 15
 Time Spent-Content Devel.: 25
 Time Spent-Multimedia Devel.: 10
 Time Spent-Pedagogical Approach: 5
 Time Spent-Designing Layout: 5
 Time Spent-Testing Course: 5
 Time Spent-Copyright Clearance: 0

Barriers: I had to make the time to do all the work within an already very busy schedule.
 Receive a Copy?: Yes
 Additional Comments: Without the high level of technical support, instruction, & information I have received from the Technology Center, I would not have been able to complete the project. In fact, if I had not been sure of the high level of support, I would not have attempted to develop an interactive, multimedia online class.

Course(s) Taught: CI659, CI680, LS530, CI621, CI501, EDF502,....
 Credit Hours: 18+
 Type of Institution: CC
 Your Role at the Inst.: Ffac
 Form of Compensation: Stipend
 Amount of Stipend: \$1500 ea.
 Technology Tool Used: WebCT
 % of Time Spent: 15
 Num. Weeks to Devel: 5
 Time Spent Learning Tool: 10
 Time Spent on Syllabus: 5
 Time Spent-Course Int. Devel: 5
 Time Spent-Learning Activities: 10
 Time Spent-Content Devel.: 35
 Time Spent-Multimedia Devel.: 0
 Time Spent-Pedagogical Approach: 15
 Time Spent-Designing Layout: 10
 Time Spent-Testing Course: 5
 Time Spent-Copyright Clearance: 5
 Barriers: Lack of understanding (by both the instructor and students) of on-line learning techniques and strategies.
 Receive a Copy?: Yes
 Additional Comments: Good Luck!

Course(s) Taught: Medical Terminology
 Credit Hours: 2
 Type of Institution: Tech
 Your Role at the Inst.: Ffac
 Form of Compensation: Stipend
 Amount of Stipend: \$1000
 Technology Tool Used: LearningSpace
 % of Time Spent: 10
 Num. Weeks to Devel: 5
 Time Spent Learning Tool: 5
 Time Spent on Syllabus: 10
 Time Spent-Course Int. Devel: 10
 Time Spent-Learning Activities: 20
 Time Spent-Content Devel.: 25
 Time Spent-Multimedia Devel.: 0
 Time Spent-Pedagogical Approach: 15
 Time Spent-Designing Layout: 10
 Time Spent-Testing Course: 5
 Time Spent-Copyright Clearance: 0
 Barriers: Time it takes to get everything in order, the learning activities, the web sites, the discussion threads.
 Receive a Copy?: Yes
 Additional Comments: good luck!

Course(s) Taught: Diseño de Cursos en Internet

Credit Hours:

Type of Institution: Graduate

Your Role at the Inst.: Cons

Form of Compensation: Release

Amount of Stipend: \$1000

Technology Tool Used: WebCT

% of Time Spent: 20

Num. Weeks to Devel: 5

Time Spent Learning Tool: 20

Time Spent on Syllabus: 0

Time Spent-Course Int. Devel: 20

Time Spent-Learning Activities: 0

Time Spent-Content Devel.: 50

Time Spent-Multimedia Devel.: 5

Time Spent-Pedagogical Approach: 0

Time Spent-Designing Layout: 0

Time Spent-Testing Course: 5

Time Spent-Copyright Clearance: 0

Barriers: The faculty has not computer experience, and is diffculted accept their new roll.

Transfer from the traditional material to the online metodology.

Receive a Copy?: Yes

Additional Comments: This course was implement using a course content already developed to teach faculty.

Course(s) Taught: Writing Improvement Workshop, Literature of Fantasy

Credit Hours: 3

Type of Institution: Graduate

Your Role at the Inst.: Pfac

Form of Compensation: RegPay

Technology Tool Used: WebCT

% of Time Spent: 30

Num. Weeks to Devel: 5

Time Spent Learning Tool: 20

Time Spent on Syllabus: 15

Time Spent-Course Int. Devel: 3

Time Spent-Learning Activities: 5

Time Spent-Content Devel.: 40

Time Spent-Multimedia Devel.: 2

Time Spent-Pedagogical Approach: 10

Time Spent-Designing Layout: 10

Time Spent-Testing Course: 0

Time Spent-Copyright Clearance: 0

Barriers: Time and practice are perhaps the greatest barriers to development. I say practice because until you have taught using various technologies in various circumstances, you don't really know what is going to work best in a given circumstance. I found that I was constantly modifying my course as the semester progressed. While ideally you would have the entire course on-line before the semester began, in practice that is hard to accomplish. The creation of web pages is time consuming as is the research for each segment of the course. I found it was easier to create each segment just prior to when the class covered the material. I could then base the material in part on where the class was at that moment. In teaching the same course in subsequent semesters, of course I had more basic material to work with, so the amount of time needed to update the material for the class was lower.

Receive a Copy?: Yes

Additional Comments: I would like to clarify the type of course I was teaching. I firmly believe that on-line technology should be used to supplement rather than suplant the traditional classroom. While distance learning is perhaps at times the only alternative for some students, I do not believe that they

receive the same level of education. Furthermore, these classes cannot stand alone once created. They are, and must be, a dynamic interaction between the instructor and the student if they are to be effective. My courses were taught in a networked computer classroom. This really provided the best of both worlds, allowing the class to interact both in the classroom and outside the classroom while having the benefit of multimedia support.

Course(s) Taught:	Educational Facilities Planning
Credit Hours:	3
Type of Institution:	4Year
Your Role at the Inst.:	Ffac
Form of Compensation:	Stipend
Amount of Stipend:	\$1500
Technology Tool Used:	WebCT
% of Time Spent:	25
Num. Weeks to Devel:	6
Time Spent Learning Tool:	20
Time Spent on Syllabus:	10
Time Spent-Course Int. Devel:	15
Time Spent-Learning Activities:	20
Time Spent-Content Devel.:	15
Time Spent-Multimedia Devel.:	5
Time Spent-Pedagogical Approach:	5
Time Spent-Designing Layout:	5
Time Spent-Testing Course:	5
Time Spent-Copyright Clearance:	0
Barriers:	Time is the greatest problem. Support is great. There is a great deal to learn and to keep up with.
Receive a Copy?:	Yes
Additional Comments:	

Course(s) Taught:	Introduction to Marriage, Couples and Family Therapy; Adult and Family Development and Transition
Credit Hours:	6
Type of Institution:	Graduate
Your Role at the Inst.:	Ffac
Form of Compensation:	Stipend
Amount of Stipend:	\$3000
Release Time Salary:	\$1500/course
Technology Tool Used:	WebCT
% of Time Spent:	20
Num. Weeks to Devel:	6
Time Spent Learning Tool:	30
Time Spent on Syllabus:	15
Time Spent-Course Int. Devel:	10
Time Spent-Learning Activities:	15
Time Spent-Content Devel.:	15
Time Spent-Multimedia Devel.:	0
Time Spent-Pedagogical Approach:	0
Time Spent-Designing Layout:	10
Time Spent-Testing Course:	5
Time Spent-Copyright Clearance:	0
Barriers:	Time to develop, Difficulty teaching human interaction skills (multimedia content not used yet and no way to give feedback to students on their interactional skills, Initial student anxiety (especially about quizzes)
Receive a Copy?:	Yes
Additional Comments:	Having a central "meeting place" outside of class and flexibility to communicate (time of day, etc.) has been wonderful additions to course delivery

Course(s) Taught:	Business Statistics
Credit Hours:	3
Type of Institution:	4Year
Your Role at the Inst.:	Ffac
Form of Compensation:	RegPay
Technology Tool Used:	WebCT
% of Time Spent:	40
Num. Weeks to Devel:	6
Time Spent Learning Tool:	20
Time Spent on Syllabus:	5
Time Spent-Course Int. Devel:	5
Time Spent-Learning Activities:	25
Time Spent-Content Devel.:	10
Time Spent-Multimedia Devel.:	5
Time Spent-Pedagogical Approach:	10
Time Spent-Designing Layout:	5
Time Spent-Testing Course:	10
Time Spent-Copyright Clearance:	5
Barriers:	The greatest barrier to developing an online course is the lack of institutional support for such undertakings. There is a significant amount of time required to rethink the design of a course taught in a traditional setting to make it suitable for online delivery. My experience is that this development time is not compensated appropriately by the administration in terms of faculty teaching load.
Receive a Copy?:	Yes
Additional Comments:	Although not a development issue, the time required to interact with students in an online course is significantly greater in an online course than a course taught in a traditional way as well. On average I can cover less material online with fewer students than in a traditional classroom setting.

Course(s) Taught:	Curriculum Leadership, Instructional Leadership, Admin. of El., Middle & Sec. Schools
Credit Hours:	9
Type of Institution:	Graduate
Your Role at the Inst.:	Ffac
Form of Compensation:	Stipend
Amount of Stipend:	\$3000 x 3
Technology Tool Used:	WebCT
% of Time Spent:	20%/course
Num. Weeks to Devel:	6 each
Time Spent Learning Tool:	5
Time Spent on Syllabus:	5
Time Spent-Course Int. Devel:	5
Time Spent-Learning Activities:	25
Time Spent-Content Devel.:	35
Time Spent-Multimedia Devel.:	0
Time Spent-Pedagogical Approach:	10
Time Spent-Designing Layout:	5
Time Spent-Testing Course:	5
Time Spent-Copyright Clearance:	5
Barriers:	The amount of time required to develop a course, primarily locating appropriate materials
Receive a Copy?:	Yes
Additional Comments:	The stipend is a nice incentive, but without the extensive amount of support within the institution I'm not sure that would have been adequate considering the amount of time invested. The technical support available and the encouragement of colleagues were more important to me in making the effort.

Course(s) Taught: CMM601T
 Credit Hours: 3
 Type of Institution: 4Year
 Your Role at the Inst.: Ffac
 Form of Compensation: Stipend
 Amount of Stipend: \$3000
 Technology Tool Used: WebCT
 % of Time Spent: 5
 Num. Weeks to Devel: 60
 Time Spent Learning Tool: 30
 Time Spent on Syllabus: 5
 Time Spent-Course Int. Devel: 5
 Time Spent-Learning Activities: 10
 Time Spent-Content Devel.: 40
 Time Spent-Multimedia Devel.: 0
 Time Spent-Pedagogical Approach: 5
 Time Spent-Designing Layout: 3
 Time Spent-Testing Course: 2
 Time Spent-Copyright Clearance: 0
 Barriers: Lack of technical expertise
 Receive a Copy?: Yes
 Additional Comments: Potential is magnificent, but my lack of technical expertise is a major constraint.

Course(s) Taught: Financial Choices in Your Life
 Credit Hours: 3
 Type of Institution: Tech
 Your Role at the Inst.: Ffac
 Form of Compensation: Stipend
 Amount of Stipend: \$25 per student
 Technology Tool Used: WebCT
 % of Time Spent: 320 hours
 Num. Weeks to Devel: 8
 Time Spent Learning Tool: 20
 Time Spent on Syllabus: 1
 Time Spent-Course Int. Devel: 1
 Time Spent-Learning Activities: 10
 Time Spent-Content Devel.: 60.5
 Time Spent-Multimedia Devel.: 1
 Time Spent-Pedagogical Approach: 5
 Time Spent-Designing Layout: 1
 Time Spent-Testing Course: .5
 Time Spent-Copyright Clearance: n/a
 Barriers: Personal. Faculty do not see rewards. As you can see, I set up my own reward system, and the College bought it.
 Receive a Copy?: Yes
 Additional Comments: I think this is a very important field of study. Administrators can easily make the development process rewarding and moral-boosting for faculty. There is a definite need to be creative in approach to Internet Ed, so the admin can deaden it by bureacratic rules or enliven it by adding to faculty income. The quality of education will come out of competition of courses judged openly in the marketplace.

Course(s) Taught: Management Information Systems, Database Management Design, Special Topics in Administration, Special Topics in Educational Technology
 Credit Hours: 12
 Type of Institution: 4Year
 Your Role at the Inst.: Ffac

Form of Compensation: Stipend
 Amount of Stipend: \$575
 Technology Tool Used: WebCT and HTML
 % of Time Spent: 30
 Num. Weeks to Devel: 8
 Time Spent Learning Tool: 3
 Time Spent on Syllabus: 3
 Time Spent-Course Int. Devel: 3
 Time Spent-Learning Activities: 10
 Time Spent-Content Devel.: 40
 Time Spent-Multimedia Devel.: 10
 Time Spent-Pedagogical Approach: 5
 Time Spent-Designing Layout: 20
 Time Spent-Testing Course: 6
 Time Spent-Copyright Clearance: 0
 Barriers: Institution Support
 Receive a Copy?: Yes
 Additional Comments:

Course(s) Taught: MICR121,MICR125
 Credit Hours: One term courses
 Type of Institution: CC
 Your Role at the Inst.: Ffac
 Form of Compensation: Stipend
 Amount of Stipend: \$4000 each
 Technology Tool Used: WebCT
 % of Time Spent: 10
 Num. Weeks to Devel: 8
 Time Spent Learning Tool: 10
 Time Spent on Syllabus: 10
 Time Spent-Course Int. Devel: 10
 Time Spent-Learning Activities: 15
 Time Spent-Content Devel.: 30
 Time Spent-Multimedia Devel.: already have cd
 Time Spent-Pedagogical Approach: 5
 Time Spent-Designing Layout: 10
 Time Spent-Testing Course: 10
 Time Spent-Copyright Clearance: 0
 Barriers: administrative reserve re new technologies, lack of incentive to develop re professional assessment and promotion.lack of funding to the dept re employing these technologies
 Receive a Copy?: Yes
 Additional Comments: we already had 2 published cd's rich in animations,video,images and audio so we did not have to develop these from scratch which is very expensive and time consuming.

Course(s) Taught: Teaching Citizenship & Governance
 Credit Hours: 3
 Type of Institution: 4Year
 Your Role at the Inst.: Ffac
 Form of Compensation: Stipend
 Amount of Stipend: \$4000
 Technology Tool Used: HTML-FrontPage
 % of Time Spent: 50
 Num. Weeks to Devel: 8
 Time Spent Learning Tool: 10
 Time Spent on Syllabus: 10
 Time Spent-Course Int. Devel: 5

Time Spent-Learning Activities: 25
 Time Spent-Content Devel.: 20
 Time Spent-Multimedia Devel.: 0
 Time Spent-Pedagogical Approach: 10
 Time Spent-Designing Layout: 10
 Time Spent-Testing Course: 10
 Time Spent-Copyright Clearance: 0
 Barriers: Universities providing sufficient rewards for faculty to devote the time to develop such courses.
 Receive a Copy?: Yes
 Additional Comments:

Course(s) Taught: Accounting 318E
 Credit Hours: 3
 Type of Institution: 4Year
 Your Role at the Inst.: Ffac
 Form of Compensation: Stipend
 Amount of Stipend: \$1500
 Technology Tool Used: WebCT
 % of Time Spent: 15
 Num. Weeks to Devel: 8
 Time Spent Learning Tool: 0
 Time Spent on Syllabus: 25
 Time Spent-Course Int. Devel: 0
 Time Spent-Learning Activities: 15
 Time Spent-Content Devel.: 40
 Time Spent-Multimedia Devel.: 0
 Time Spent-Pedagogical Approach: 0
 Time Spent-Designing Layout: 0
 Time Spent-Testing Course: 15
 Time Spent-Copyright Clearance: 5
 Barriers:
 Receive a Copy?: Yes
 Additional Comments: pend for course development was 3,000 but the course was co-developed so the stipend was split between un.

Course(s) Taught: BU156 Mathematics of Business
 Credit Hours: 4
 Type of Institution: CC
 Your Role at the Inst.: Pfac
 Form of Compensation: Stipend
 Amount of Stipend: 0
 Technology Tool Used: WebCT
 % of Time Spent: 10
 Num. Weeks to Devel: 8
 Time Spent Learning Tool: 25
 Time Spent on Syllabus: 5
 Time Spent-Course Int. Devel: 20
 Time Spent-Learning Activities: 20
 Time Spent-Content Devel.: 10
 Time Spent-Multimedia Devel.: 0
 Time Spent-Pedagogical Approach: 5
 Time Spent-Designing Layout: 5
 Time Spent-Testing Course: 10
 Time Spent-Copyright Clearance: 0
 Barriers: Acceptance of administration to compensate instructor for development ime.

Receive a Copy?: Yes

Additional Comments:

Course(s) Taught: Basic Economics and Intro to Aviation

Credit Hours: 6

Type of Institution: CC

Your Role at the Inst.: Ffac

Form of Compensation: Stipend

Amount of Stipend: \$1000/hour

Technology Tool Used: WebCT

% of Time Spent: 120 hours/first, 65 hours/second

Num. Weeks to Devel: 8-first, 6-second

Time Spent Learning Tool: 10

Time Spent on Syllabus: 1

Time Spent-Course Int. Devel: 1

Time Spent-Learning Activities: 34

Time Spent-Content Devel.: 32

Time Spent-Multimedia Devel.: 1

Time Spent-Pedagogical Approach: 1

Time Spent-Designing Layout: 10

Time Spent-Testing Course: 9

Time Spent-Copyright Clearance: 1

Barriers: * Going through the MU process of online course approval. - waiting for first stage approval - the system was so-o-o-o slow. - waiting for second stage approval - the system was so-o-o-o slow.

* Administrator problems. lack of knowledge or understanding.

* Preparing the quizzes and examinations in HTML format.

* Working out the pay arrangements.

Receive a Copy?: Yes

Additional Comments: I think online courses are great, and only feel administration has a lack of understanding and/or interest. The whole online course system needs revision and effort from qualified people who are motivated, knowledgeable, and interested what is being done.

Course(s) Taught: MAT 145, 146, 150, 098

Credit Hours: 12

Type of Institution: CC

Your Role at the Inst.: Ffac

Form of Compensation: Stipend

Amount of Stipend: \$12,000

Technology Tool Used: WebCT

% of Time Spent: 3-5

Num. Weeks to Devel: Up to 8 each

Time Spent Learning Tool: 5

Time Spent on Syllabus: 5

Time Spent-Course Int. Devel: 0

Time Spent-Learning Activities: 5

Time Spent-Content Devel.: 70

Time Spent-Multimedia Devel.: 5

Time Spent-Pedagogical Approach: 0

Time Spent-Designing Layout: 8

Time Spent-Testing Course: 2

Time Spent-Copyright Clearance: 0

Barriers: Time and perception of effectiveness of e-courses.

Receive a Copy?: Yes

Additional Comments:

Appendix D

Comments Received from Teaching Online Courses Survey (names withheld)

Course Name: ESL Writing Workshop
 Type of Institution: CC
 Form of Compensation: Flat Rate Stipend
 Amount of Stipend: Released time 1 course per semester for a year or so
 Percent of Time Spent: 30
 Time Compared to Trad.: higher
 Time Spent Teaching How: 10
 Time Spent on E-mail: 25
 Time Spent on Office Hr.: included elsewhere
 Time Spent Grading: 25
 Time Spent on Maint.: 10
 Time Spent on Interacts: 25
 Time Spent on Other: 5
 Barriers: My greatest barrier is my own inability to bend enough to figure out how to "reach" students whom I don't see face to face. Another barrier is lack of student services support to undergird an online program.
 Would you like to receive a copy?: Yes
 Additional Comments:

Course Name: civil rights and social justice 3
 Type of Institution: Graduate
 Form of Compensation: Part of Regular Pay
 Amount of Stipend:
 Percent of Time Spent: 40
 Time Compared to Trad.: higher percentage by 20%
 Time Spent Teaching How: 10
 Time Spent on E-mail: 10
 Time Spent on Office Hr.: 0
 Time Spent Grading: 0
 Time Spent on Maint.: 30
 Time Spent on Interacts: 20
 Time Spent on Other: 30
 Barriers: Lack of time to prepare course, Very little tech support from college, Lack of training of students for online courses
 Would you like to receive a copy?: Yes
 Additional Comments: Other = attending meetings related to online courses and preparation time. It takes an enormous amount of time to prepare an online course, esp if the college is new to distance learning and provide very little training or support.

Course Name: Writing Improvement Workshop, Literature of Fantasy
 Type of Institution: Graduate
 Form of Compensation: Part of Regular Pay
 Amount of Stipend:
 Percent of Time Spent: 70
 Time Compared to Trad.: Slightly higher, 10%
 Time Spent Teaching How: 5
 Time Spent on E-mail: 5
 Time Spent on Office Hr.: 0
 Time Spent Grading: 30
 Time Spent on Maint.: 30

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Time Spent on Interacts: 30
 Time Spent on Other: 0
 Barriers:
 Would you like to receive a copy?: Yes
 Additional Comments: spell check your survey :-)

Course Name: English Composition I, [3 hours]and English Composition II [3 hours]
 Type of Institution: 4Year
 Form of Compensation: Flat Rate Stipend
 Amount of Stipend: 1500
 Percent of Time Spent: 15-20 hours/week
 Time Compared to Trad.: HIgher. It takes about 1/2 again the time for an on-line course with the same number of students.
 Time Spent Teaching How:2
 Time Spent on E-mail: 10
 Time Spent on Office Hr.: 25
 Time Spent Grading: 50
 Time Spent on Maint.: 3
 Time Spent on Interacts: 10
 Time Spent on Other: 0
 Barriers: For me, the most difficult thing is the lack of face to face contact. It is remarkably easy to start and maintain a miscommunication with only the written word for communication. When one can speak in front of a traditional class, he or she can SEE if someone has "lost it", and back up to try again. With no real contact, a student can go an entire semester with incorrect ideas of what is expected of him. On the positive side, by teaching with the written word, I am forced to pre-think what I want to say, and added clarity may result.
 Would you like to receive a copy?: Yes
 Additional Comments: I am most afraid this is the classroom of the future. I would like to see a balance of on-line and traditional classes, offering students multi-method teaching arenas. I believe it would be in all students' best interest.

Course Name: Business Ethics - Three (3)
 Type of Institution: 4Year
 Form of Compensation: Flat Rate Stipend
 Amount of Stipend: 1500
 Percent of Time Spent: 10
 Time Compared to Trad.: Lower for traditional courses: 7 hours
 Time Spent Teaching How:5
 Time Spent on E-mail: 15
 Time Spent on Office Hr.: 0
 Time Spent Grading: 20
 Time Spent on Maint.: 0
 Time Spent on Interacts: 60
 Time Spent on Other: 0
 Barriers: (1) Technology-challenged students entering an unknown environment; (2) Unrealistic student expectations (finding how difficult self-learning environments can be; (3) communications: being specific enough for 20+ students to clearly understand what you are trying to say!
 Would you like to receive a copy?: Yes
 Additional Comments:

Course Name: Introduction to Microcomputers - 3
 Type of Institution: CC
 Form of Compensation: Part of Regular Pay
 Amount of Stipend:
 Percent of Time Spent: 60

Time Compared to Trad.: The head count was limited to 15 per class, normal classes are limited to 24. Nevertheless, 3 classes of 40 online students took 60 percent of my time, whereby 3 classes of 72 students in the classroom took 40% of my time.

Time Spent Teaching How: 10

Time Spent on E-mail: 45

Time Spent on Office Hr.: 10

Time Spent Grading: 10

Time Spent on Maint.: 10

Time Spent on Interacts: 15

Time Spent on Other: 0

Barriers: Lack of personal interaction, ie. seeing the student's responses to the learning process.

Reading is still not the same as seeing visual aids an instructor utilizes. The explanations and interaction is not as prevalent with online coursework. Many want the credits without the usual course intercommunication.

Would you like to receive a copy?: Yes

Additional Comments: Given the software from most book publishers and such media as Blackboard.com, teaching an online course is NOT difficult, but have the students REALLY LEARNED anything is questionable because the grading system is still not perfected. Are they doing their own work?

Course Name: MIS, Computer Ethics,

Type of Institution: 4Year

Form of Compensation: Flat Rate Stipend

Amount of Stipend: 1500

Percent of Time Spent: 15

Time Compared to Trad.: same

Time Spent Teaching How: 5

Time Spent on E-mail: 40

Time Spent on Office Hr.: 10

Time Spent Grading: 29

Time Spent on Maint.: 20

Time Spent on Interacts: 5

Time Spent on Other: 5

Barriers: Speed of system/networks. Students that are green, confused, don't understand computers, etc.

Would you like to receive a copy?: Yes

Additional Comments: I do think that this is the wave of the future for teaching, but it's going to take awhile for things to shake out and get better.

Course Name: HST230E and HST 342E

Type of Institution: 4Year

Form of Compensation: Stipend per Student enrolled

Amount of Stipend: \$140/complete

Percent of Time Spent: 20

Time Compared to Trad.: higher by 10%

Time Spent Teaching How: 5

Time Spent on E-mail: 15

Time Spent on Office Hr.: 0

Time Spent Grading: 70

Time Spent on Maint.: 5

Time Spent on Interacts: 5

Time Spent on Other: 0

Barriers: For instructors who don't have much computer experience the learning curve would be very steep unless they have a lot of technical support.

Would you like to receive a copy?: Yes

Additional Comments: Good Luck!

Course Name: Management Accounting, Cost Accounting, Advanced Accounting, Accounting Theory, Intermediate Accounting III (each course is a 3 hour course)
 Type of Institution: Graduate
 Form of Compensation: Part of Reg Pay
 Percent of Time Spent: 100
 Time Compared to Trad.: higher
 Time Spent Teaching How: 5
 Time Spent on E-mail: 20
 Time Spent on Office Hr.: 5
 Time Spent Grading: 10
 Time Spent on Maint.: 5
 Time Spent on Interacts: 55
 Time Spent on Other: 0
 Barriers: Lack of technical expertise by most faculty followed closely by not taking the time to train themselves in the techniques required for online teaching.
 Would you like to receive a copy?: Yes
 Additional Comments: The percent of time hides the real labor intensive process of designing the type of courses that I created. In each course, I tried to make the course stand alone without the student's needing to purchase a text.

Course Name: COM095E 3hrs./no credit & COM221E 3hrs.
 Type of Institution: CC
 Form of Compensation: Stipend per Student enrolled
 Amount of Stipend: \$60 up front, \$60 upon completion
 Percent of Time Spent: 30
 Time Compared to Trad.: 10 min. more/stud/assign
 Time Spent Teaching How: 30
 Time Spent on E-mail: 30
 Time Spent on Office Hr.: 0
 Time Spent Grading: 25
 Time Spent on Maint.: 0
 Time Spent on Interacts: 15
 Time Spent on Other: 0
 Barriers: Students are not properly informed about the course & technology requirements before enrolling.
 Would you like to receive a copy?: Yes
 Additional Comments:

Course Name: Database Management Systems (3)
 Type of Institution: 4Year
 Form of Compensation: Stipend per Student enrolled
 Amount of Stipend: No Idea
 Percent of Time Spent: 10
 Time Compared to Trad.: Lower - half of the time
 Time Spent Teaching How: 5
 Time Spent on E-mail: 30
 Time Spent on Office Hr.: 10
 Time Spent Grading: 30
 Time Spent on Maint.: 15
 Time Spent on Interacts: 0
 Time Spent on Other: 10
 Barriers: Lack of recognition for online course teaching/coaching. E-courses taught as an overload only. Poor course development
 Would you like to receive a copy?: Yes
 Additional Comments:

Course Name: Finite Math 3 credit hours
 Type of Institution: Graduate
 Form of Compensation: Part of Regular Pay
 Percent of Time Spent: 15
 Time Compared to Trad.: lower
 Time Spent Teaching How: 5
 Time Spent on E-mail: 10
 Time Spent on Office Hr.: 0
 Time Spent Grading: 50
 Time Spent on Maint.: 5
 Time Spent on Interacts: 30
 Time Spent on Other: 0
 Barriers: Finding the time and receiving the help needed to put the course online.
 Would you like to receive a copy?: No
 Additional Comments:

Course Name: COM094E
 Type of Institution: CC
 Form of Compensation: Stipend per Student enrolled
 Amount of Stipend: \$120/each
 Percent of Time Spent: 4
 Time Compared to Trad.: lower
 Time Spent Teaching How: 5
 Time Spent on E-mail: 90
 Time Spent on Office Hr.: 0
 Time Spent Grading: 5
 Time Spent on Maint.: 0
 Time Spent on Interacts: 0
 Time Spent on Other: 0
 Barriers:
 Would you like to receive a copy?: Yes
 Additional Comments:

Course Name: Coun. 698, 672, 670, Psych. 521 all 3 hours each
 Type of Institution: Graduate
 Form of Compensation: Part of Regular Pay
 Percent of Time Spent: 50
 Time Compared to Trad.: Higher by 20%
 Time Spent Teaching How: 20
 Time Spent on E-mail: 20
 Time Spent on Office Hr.: 5
 Time Spent Grading: 15
 Time Spent on Maint.: 20
 Time Spent on Interacts: 20
 Time Spent on Other: 0
 Barriers: Making the assignments as interactive as possible. Avoiding a reading and writing type interaction
 Would you like to receive a copy?: Yes
 Additional Comments:

Course Name: Ls 600, LS 610 3 hrs
 Type of Institution: Graduate
 Form of Compensation: Part of Regular Pay
 Percent of Time Spent: 30%/course

Time Compared to Trad.: About 10%/reg course
 Time Spent Teaching How:5
 Time Spent on E-mail: 40
 Time Spent on Office Hr.: 0
 Time Spent Grading: 50
 Time Spent on Maint.: 5
 Time Spent on Interacts: 0
 Time Spent on Other: 0
 Barriers: Time and institutional support. Although we enjoy great support, without it we couldn't fly!
 Would you like to receive a copy?: Yes
 Additional Comments:

Course Name: COM112E - 3
 Type of Institution: CC
 Form of Compensation: Part of Regular Pay
 Percent of Time Spent: 1/5?
 Time Compared to Trad.: higher
 Time Spent Teaching How:10
 Time Spent on E-mail: 20
 Time Spent on Office Hr.: 0
 Time Spent Grading: 60
 Time Spent on Maint.: 10
 Time Spent on Interacts: 0
 Time Spent on Other: 0
 Barriers: he students who have the wrong attitude--that this is supposed to be a short-cut through a course. Students who want to navigate the course in the manner they choose rather than follow the syllabus are problems. However, I should add that I finished for another teacher and had many problems due to that. Some students do not check their campus e-mail addresses which are the only ones we have with which to make the initial contact. This can be a problem. Students have trouble monitoring their schedules and then blame the faculty when the course cannot be "dumped" at the end to finish. Overall, I support e-courses and believe that they can be a satisfactory way to take a course. As a teacher of writing, it took me hours to grade and provide feedback on-line using the Word editing program. I am not a very good typist and an English/communication teacher has to have things right!!! Thanks for all that you do to assist us.
 Would you like to receive a copy?: Yes
 Additional Comments: Keep up the excellent work that you do for Marshall. You need a raise I am sure!!!

Course Name: English Composition 3 credits
 Type of Institution: CC
 Form of Compensation: Part of Regular Pay
 Percent of Time Spent: 50
 Time Compared to Trad.: higher. more work and time, setting up the course and responding to students
 Time Spent Teaching How:10
 Time Spent on E-mail: 20
 Time Spent on Office Hr.: ?
 Time Spent Grading: 30
 Time Spent on Maint.: 20
 Time Spent on Interacts: 15
 Time Spent on Other: 5
 Barriers: In my case, lack of any support from the College: no tech support, no college server, no advice, so software, no computer on my desk, no money for development - all run free-lance, from home.
 Would you like to receive a copy?: Yes
 Additional Comments: Older administrators, and those w/o technical experience, are afraid of this technology but too entrenched to be replaced, so the effort stagnates.

Course Name: Special Topics - Electronic Commerce
 Type of Institution: Graduate
 Form of Compensation: Flat Rate Stipend
 Amount of Stipend: \$1000
 Percent of Time Spent: 20
 Time Compared to Trad.: 150%
 Time Spent Teaching How: 1
 Time Spent on E-mail: 50
 Time Spent on Office Hr.: 10
 Time Spent Grading: 15
 Time Spent on Maint.: 4
 Time Spent on Interacts: 30
 Time Spent on Other: 0
 Barriers:
 Would you like to receive a copy?: Yes
 Additional Comments:

Course Name: Ethics 3
 Type of Institution: CC
 Form of Compensation: Part of Regular Pay
 Percent of Time Spent: 30
 Time Compared to Trad.: higher by about 20%
 Time Spent Teaching How: 5
 Time Spent on E-mail: 5
 Time Spent on Office Hr.: 15
 Time Spent Grading: 25
 Time Spent on Maint.: 20
 Time Spent on Interacts: 35
 Time Spent on Other: 0
 Barriers:

1. Student preparedness: Half of my students did not even get very far into the course before withdrawing
2. Lack of campus technical support: Our students didn't have access to any kind of technical support except faculty. Students weren't even informed about how to access the course after they enrolled; this was all left up to the individual instructor.
3. "Fiddleitis:" I noticed a tendency once I got started to "fiddle" with the course in aesthetically pleasing but non-productive ways.

 Would you like to receive a copy?: Yes
 Additional Comments:

Course Name: Human Development 3
 Type of Institution: Graduate
 Form of Compensation: Flat Rate Stipend
 Amount of Stipend: \$1500
 Percent of Time Spent: 30
 Time Compared to Trad.: same (but I had a lot of help with the technical aspects of the course from a faculty mentor)
 Time Spent Teaching How: 5
 Time Spent on E-mail: 40
 Time Spent on Office Hr.: 0
 Time Spent Grading: 30
 Time Spent on Maint.: 10
 Time Spent on Interacts: 15
 Time Spent on Other: 0
 Barriers: Lack of face to face interaction (atleast that's what the students tell me); changes and upgrades in the software system used at the university (you learn one and then have to turn around and learn

revisions); lack of time to prepare and keep up with the technology; subtle expectations that this is the way to go in teaching.

Would you like to receive a copy?: No
 Additional Comments: Promises to be an interesting study

Course Name: SCI101E
 Type of Institution: CC
 Form of Compensation: Stipend per Student enrolled
 Amount of Stipend: \$50 up front/\$50 completion
 Percent of Time Spent: 15
 Time Compared to Trad.: It is lower but not by much. I probably spend 20% of my work week teaching a conventional course. Neither of these numbers include preparation.
 Time Spent Teaching How:5
 Time Spent on E-mail: 40
 Time Spent on Office Hr.: 0
 Time Spent Grading: 5
 Time Spent on Maint.: 40
 Time Spent on Interacts: 10
 Time Spent on Other: 0
 Barriers: The greatest barrier is not the delivery. The greatest barrier is time to develop the course. I have spent a huge amount of time on the course for development and still have more to do. Web-CT is capable of delivering very effective content. But the content has to be developed. If more time were available better more interactive content could be developed. The instructors have the ability to make the courses better but they can't afford the time. My wife is constantly asking me why I do it since the wage/hr does not justify the effort that I have expended.
 Would you like to receive a copy?: Yes
 Additional Comments: Institutions should pay faculty adequately and there should be some consistency among universities if distance education is going to be quality education. I would not mind working nights and weekends to improve my course and to develop others if there were a monetary award. In addition there needs to be some recognition built into faculty evaluation for teaching a distance learning course and for technological innovation. If institutions are interested in quality they should recognize and reward it.

Course Name: LS 510,675,170,719
 Type of Institution: Graduate
 Form of Compensation: Flat Rate Stipend
 Percent of Time Spent: 75
 Time Compared to Trad.: 50% before
 Time Spent Teaching How:5
 Time Spent on E-mail: 50
 Time Spent on Office Hr.: 15
 Time Spent Grading: 10
 Time Spent on Maint.: 10
 Time Spent on Interacts: 10
 Time Spent on Other: 0
 Barriers: Students getting initial access
 Would you like to receive a copy?: Yes
 Additional Comments: The former way of entering students is superior to the present system.

Course Name: English 111 (4cr.), English 112 (4cr.), English223 (3 cr.), English 225 (3 cr.), English 243 (3 cr.)
 Type of Institution: CC
 Form of Compensation: Part of Regular Pay
 Amount of Stipend: 1 extra credit hour counted towards load per online course
 Percent of Time Spent: 90

Time Compared to Trad.: The percentage doesn't differ because my entire load was taught online -- when I taught in the traditional classroom, I still spent 90% of my time teaching. The difference would be in the amount of hours spent -- a conservative estimate would be 15 - 20% more in the online teaching

Time Spent Teaching How: 2

Time Spent on E-mail: 15

Time Spent on Office Hr.: 5

Time Spent Grading: 45

Time Spent on Maint.: 15

Time Spent on Interacts: 15

Time Spent on Other: 3

Barriers: The lack of administrative support. It is a tremendous outlay of time to design a quality course, teach it well, and maintain it, but there is very little recognition on the part of administration that it differs at all from the traditional classroom. Online teaching is dramatically different and the load issues and other faculty related concern need to be redesigned to better fit this method of instruction.

Would you like to receive a copy?: Yes

Additional Comments:

Course Name: General Biologhy I and II 4 Credits each Taught one at a time

Type of Institution: CC

Form of Compensation: Part of Regular Pay

Percent of Time Spent: 50

Time Compared to Trad.: Definitely Higher I would estimate 2 to 3 times as many hours depending on class size

Time Spent Teaching How: 5

Time Spent on E-mail: 45

Time Spent on Office Hr.: 5

Time Spent Grading: 20

Time Spent on Maint.: 20

Time Spent on Interacts: 0

Time Spent on Other: 5

Barriers: There are two large barriers to online courses

1. Attitudes among administrators and colleagues. It is widely perceived that I am not working as hard because I do some of the email work from home and I don't meet with students in the traditional classroom. Some colleagues fear this modality; they fear that either they will have to do it or that they won't be needed if it is too successful. Administrators want to treat it like a traditional course with no consideration of actual workload.

2. Technology capabilities at the college. The course I teach is hosted at another campus because my campus could not support what I wanted to do at the beginning. Technology people are more concerned with telling me what I need than asking me what I want.

Would you like to receive a copy?: Yes

Additional Comments: I am very interested in your results.

Course Name: College Algebra (5 credits), Trigonometry (5 credits), PreCollege Algebra (3 credits), PreAlgebra(3 credits)

Type of Institution: Tech

Form of Compensation: Part of Regular Pay

Percent of Time Spent: 25

Time Compared to Trad.: It is comparable to regular courses, but heavy in development time.

Time Spent Teaching How: 5

Time Spent on E-mail: 45

Time Spent on Office Hr.: 15

Time Spent Grading: 15

Time Spent on Maint.: 20

Time Spent on Interacts: 0

Time Spent on Other: 0

Barriers: Getting the students to participate. I have had trouble getting them involved in the "online component" of my course. This means responding to questions posted, visiting the required online references, etc. I have also had some difficulty communicating to the students that the time they would regularly spend in lecture needs to be spent on these learning activities.

Would you like to receive a copy?: Yes

Additional Comments:

Course Name: EDUI 6707 (4.5 quarter units) History & Culture of Online Learning Communities

Type of Institution: Graduate

Form of Compensation: Part of Regular Pay

Percent of Time Spent: 40

Time Compared to Trad.: higher -- usually a course is 30% of my time

Time Spent Teaching How: 0

Time Spent on E-mail: 15

Time Spent on Office Hr.: 0

Time Spent Grading: 5

Time Spent on Maint.: 5

Time Spent on Interacts: 75

Time Spent on Other: 0

Barriers: the time commitment

Would you like to receive a copy?: Yes

Additional Comments:

Course Name: LS500(3 hrs.); LS535 (3); LS630 (3); LS645 (3); LS775 (3)

Type of Institution: Graduate

Form of Compensation: Flat Rate Stipend

Amount of Stipend: \$1500

Percent of Time Spent: 70

Time Compared to Trad.: The percentage of time required for an online course is much higher than for a traditional course. I'd estimate maybe 30% of my time per traditional course per week would be average.

Time Spent Teaching How: 5

Time Spent on E-mail: 25

Time Spent on Office Hr.: 5

Time Spent Grading: 25

Time Spent on Maint.: 20

Time Spent on Interacts: 5

Time Spent on Other: 15

Barriers: Online courses are incredibly labor-intensive. Maybe we need to find a different way to calculate FTEs (or whatever the appropriate measure is) to reflect that additional work. If I teach a traditional course, it's entirely likely there will be several students who never have anything to say. They'll come to class, I'll lecture and involve those who want to talk in some discussion, but the others will just listen. Online, however, each of them has to talk to me. I have a minimum of 4 or 5 sustained conversations with every student (depending on how many major assignments there are), which is far more contact than I'd have in a conventional classroom.

Would you like to receive a copy?: Yes

Additional Comments:

Course Name: Administration of Elementary, Middle and Secondary Schools

Type of Institution: Graduate

Form of Compensation: Flat Rate Stipend

Amount of Stipend:

Percent of Time Spent: 60

Time Compared to Trad.: much higher, traditional courses require only about 40% of my actual work time, including preparation, teaching and handling students' papers

Time Spent Teaching How: 15

Time Spent on E-mail: 30

Time Spent on Office Hr.: 0
 Time Spent Grading: 30
 Time Spent on Maint.: 15
 Time Spent on Interacts: 10
 Time Spent on Other: 0
 Barriers: 1) Extensive amount of time required for course maintenance; 2) Complications resulting from software changes
 Would you like to receive a copy?: Yes
 Additional Comments: I have enjoyed being involved with WebCT, and like creating courses. It becomes very frustrating, however, when I can't help students with their problems. Having to rely extensively on the system administrator becomes burdensome for both parties! (Although I have been extremely pleased with the efforts to assist me, I would feel better if I could solve more of the issues myself, without having to ASK for help so much!)

Course Name: MAT 098, 145, 146, 150E
 Type of Institution: CC
 Form of Compensation: Flat Rate Stipend
 Amount of Stipend: \$1000/credit hour
 Percent of Time Spent: Depends on the semester. 2 - 6 hrs.
 Time Compared to Trad.: Significantly less. Although enrollments are currently low.
 Time Spent Teaching How: 10
 Time Spent on E-mail: 50
 Time Spent on Office Hr.: 0
 Time Spent Grading: 30
 Time Spent on Maint.: 10
 Time Spent on Interacts: 0
 Time Spent on Other: 0
 Barriers: Knowledge of online pedagogy and design and development time.
 Would you like to receive a copy?: Yes
 Additional Comments:

Course Name: Integrale Bedrijfsvoering (Integrated Business Management)
 Type of Institution: Graduate
 Form of Compensation: Part of Regular Pay
 Percent of Time Spent: 8 hours
 Time Compared to Trad.: 140%
 Time Spent Teaching How: 5
 Time Spent on E-mail: 10
 Time Spent on Office Hr.: 0
 Time Spent Grading: 20
 Time Spent on Maint.: 25
 Time Spent on Interacts: 10
 Time Spent on Other: 30
 Barriers: discipline
 Would you like to receive a copy?: Yes
 Additional Comments:

Course Name: 9 Ind. Mgmt. approx. 12 CEU each--3 Telecommunic. approx. 8-36 CEU each
 Type of Institution: Tech
 Form of Compensation: Stipend per Student enrolled
 Amount of Stipend: PerStudent Approx. \$250. each
 Percent of Time Spent: 75
 Time Compared to Trad.: Lower-Interact is Less with FAQ's
 Time Spent Teaching How: 5
 Time Spent on E-mail: 15
 Time Spent on Office Hr.: 15

Time Spent Grading: 15
 Time Spent on Maint.: 5
 Time Spent on Interacts: 30
 Time Spent on Other: 15
 Barriers: As yet I see NO barriers, yet some revision comes forth as Student Feedback is
 Implimented. I do not see this as a Barrier.
 Would you like to receive a copy?: Yes
 Additional Comments:

Course Name: Techie Teachers: Using the Internet as a Professional Tool - 2 staff dev. units - 20 hours
 K-12 teachers is the answer to #2
 Type of Institution: CC
 Form of Compensation: Stipend per Student enrolled
 Amount of Stipend: \$40/student
 Percent of Time Spent: 15
 Time Compared to Trad.: about the same after development time
 Time Spent Teaching How:5
 Time Spent on E-mail: 25
 Time Spent on Office Hr.: 5
 Time Spent Grading: 20
 Time Spent on Maint.: 15
 Time Spent on Interacts: 25
 Time Spent on Other: 5
 Barriers: Student difficulty with software.
 Would you like to receive a copy?: Yes
 Additional Comments:

Course Name: LS740, LS625, and others
 Type of Institution: Graduate
 Form of Compensation: Part of Regular Pay
 Percent of Time Spent: 30
 Time Compared to Trad.: about 20 % for a regular course
 Time Spent Teaching How:20
 Time Spent on E-mail: 40
 Time Spent on Office Hr.: 5
 Time Spent Grading: 15
 Time Spent on Maint.: 5
 Time Spent on Interacts: 10
 Time Spent on Other: 5
 Barriers: ability to spend some time face to face. Compressed video would help if it works.
 Would you like to receive a copy?: Yes
 Additional Comments: This is the wave of the future.

Course Name: General Psychology 3 hours
 Type of Institution: Graduate
 Form of Compensation: Stipend per Student enrolled
 Amount of Stipend: \$130/STUDENT
 Percent of Time Spent: 10-15%
 Time Compared to Trad.: somewhat lower
 Time Spent Teaching How:15
 Time Spent on E-mail: 40
 Time Spent on Office Hr.: 0
 Time Spent Grading: 5
 Time Spent on Maint.: 35
 Time Spent on Interacts: 3

Time Spent on Other: 2
 Barriers: 1. Coming to understand how to present material in this format. I now begin to see how a course like this should possibly be constructed, which suggests the need to completely redevelop the course material. Also, for many, the technical aspects of constructing pages, and general computer usage may be problems, unless you have a staff or knowledgeable assistants.
 Would you like to receive a copy?: Yes
 Additional Comments: I don't think this kind of course can, or should, replace more traditional classes. The instructor-student interaction is an important element of the instructional process, for both parties. Also, unless a student is extremely self-disciplined, they have a tendency to drop out of the process. It should be primarily targeted toward those populations for whom attending a regular class is not an option - home-bound due to illness or disability, those whose work schedules prevent regular classes, or others who for one reason or another, find it impossible or impractical to appear on campus.

Course Name: Financial Risk Management
 Type of Institution: 4Year
 Form of Compensation: Flat Rate Stipend
 Amount of Stipend: \$3000
 Percent of Time Spent: 50 plus 3-5 hours per week
 Time Compared to Trad.: higher because of development
 Time Spent Teaching How: 10
 Time Spent on E-mail: 5
 Time Spent on Office Hr.: 0
 Time Spent Grading: 25
 Time Spent on Maint.: 30
 Time Spent on Interacts: 30
 Time Spent on Other: 0
 Barriers: Time of development. But learning how to put course up and the things that do not work also are a problem
 Would you like to receive a copy?: No
 Additional Comments: Reason #9 is no is simply your questions make it difficult to really determine what is imp and what is time consuming for on-line

Course Name: Distance Learning Theory & Producing DE Resources
 Type of Institution: Graduate
 Form of Compensation: Flat Rate Stipend
 Amount of Stipend: \$2500
 Percent of Time Spent: 15
 Time Compared to Trad.: same
 Time Spent Teaching How: 15
 Time Spent on E-mail: 20
 Time Spent on Office Hr.: 0
 Time Spent Grading: 15
 Time Spent on Maint.: 15
 Time Spent on Interacts: 35
 Time Spent on Other: 0
 Barriers: Limitations in synchronous interaction
 Would you like to receive a copy?: Yes
 Additional Comments: I developed a 3-credit graduate-level course for online delivery from scratch with two other colleagues in a total of approximately 200 hours.

Course Name: 6 different postgrad courses for science, math and IT teachers -- each would be 1/4 of a full-time one semester load
 Type of Institution: Graduate
 Form of Compensation: Part of Regular Pay
 Percent of Time Spent: 9-

Time Compared to Trad.: much higher -- up to 2 x
 Time Spent Teaching How: 10
 Time Spent on E-mail: 20
 Time Spent on Office Hr.: 20
 Time Spent Grading: 10
 Time Spent on Maint.: 30
 Time Spent on Interacts: 10
 Time Spent on Other: 0
 Barriers: HUGE start-up (course creation) time committment, usually done by prof working 90 hour weeks until the course is "established"
 Would you like to receive a copy?: Yes
 Additional Comments: I don't think univ administrators appreciate the effort involved in creating and maintains WWW courses -- but they certainly are happy to take the "profits"...

Course Name: Sport Administration course 3
 Type of Institution: 4Year
 Form of Compensation: Part of Regular Pay
 Amount of Stipend:
 Percent of Time Spent: 10
 Time Compared to Trad.: 15%
 Time Spent Teaching How: 10
 Time Spent on E-mail: 10
 Time Spent on Office Hr.: 10
 Time Spent Grading: 25
 Time Spent on Maint.: 20
 Time Spent on Interacts: 25
 Time Spent on Other: 0
 Barriers: Sheer time. Emails can be problematic. Hard to set up, but once it is it runs fairly well.
 Faculty support (computer support for server) is a must.
 Would you like to receive a copy?: No
 Additional Comments:

Course Name: CSD 101E, 3 creidt Hours
 Type of Institution: 4Year
 Form of Compensation: Stipend per Student enrolled
 Amount of Stipend: \$130
 Percent of Time Spent: 12 hours/week
 Time Compared to Trad.: Higher, it is double the time due to high enrollment
 Time Spent Teaching How: 10
 Time Spent on E-mail: 25
 Time Spent on Office Hr.: 5
 Time Spent Grading: 40
 Time Spent on Maint.: 5
 Time Spent on Interacts: 10
 Time Spent on Other: 5
 Barriers: Students' background. New computer users have more difficult time to do the course work and to follow instructions. This is mainly due to the lack of knowledge in small skills such as sending an email in certain format, attaching a afile, working with zipped files. downloading files from the course homepage, etc...
 Would you like to receive a copy?: Yes
 Additional Comments:

Course Name: The Rise of Modern Asia, H246, 4 UG cr hrs
 Type of Institution: 4Year
 Form of Compensation: Stipend per Student enrolled
 Percent of Time Spent: 20

Time Compared to Trad.: higher
 Time Spent Teaching How: 10
 Time Spent on E-mail: 20
 Time Spent on Office Hr.: 10
 Time Spent Grading: 20
 Time Spent on Maint.: 5
 Time Spent on Interacts: 30
 Time Spent on Other: 5
 Barriers: Pressure of time
 Would you like to receive a copy?: Yes
 Additional Comments: Your study is important--I look forward to getting a copy.

Course Name: Intro Psychology I and II
 Type of Institution: CC
 Form of Compensation: Part of Regular Pay
 Amount of Stipend:
 Percent of Time Spent: 40
 Time Compared to Trad.: Higher by about 15%
 Time Spent Teaching How: 20
 Time Spent on E-mail: 15
 Time Spent on Office Hr.: 10
 Time Spent Grading: 25
 Time Spent on Maint.: 30
 Time Spent on Interacts: 0
 Time Spent on Other: 0
 Barriers: 1. Recognition by the college of the time needed to acquire the skill set needed to develop and teach an online course.
 2. Absence of rewarding personal contacts with students.
 Would you like to receive a copy?: Yes
 Additional Comments: Good luck with your project!

Course Name: Management Communications (3), Human Resource Development (3), Business Communications (3)
 Type of Institution: 4Year
 Form of Compensation: Part of Regular Pay
 Percent of Time Spent: 75
 Time Compared to Trad.: much higher; about 25% more time
 Time Spent Teaching How: 5
 Time Spent on E-mail: 50
 Time Spent on Office Hr.: 5
 Time Spent Grading: 25
 Time Spent on Maint.: 5
 Time Spent on Interacts: 10
 Time Spent on Other: 0
 Barriers: Oral communications. Students who think they have the right connections to access our course management software; students who do not have the proper software to successfully complete the course.
 Would you like to receive a copy?: Yes
 Additional Comments:

Course Name: Sociology 201 and 202, 3 credit hours each
 Type of Institution: CC
 Form of Compensation: Stipend per Student enrolled
 Amount of Stipend: \$1500 per 3 credit course with 22 students enrolled
 Percent of Time Spent: 10
 Time Compared to Trad.: lower or close to the same

Time Spent Teaching How: 10
 Time Spent on E-mail: 40
 Time Spent on Office Hr.: 10
 Time Spent Grading: 20
 Time Spent on Maint.: 20
 Time Spent on Interacts: 0
 Time Spent on Other: 0

Barriers: The differences in technological expertise of students make it difficult to creat chat lines, or even a streamed interactive conversation. I spend as more of my time teaching technology and less of it teaching my subject matter. Although I feel both are important, I don't feel that I get to teach as much in a distance education course/online course as I do in the lecture course. Basically, students are missing the discussion of the lecture course. They can still learn the material. The educational process is beneficial to those who couldn't take a lecture course, but many students take a course online for convenience even when they could have selected a lecture course. I am sorry to see those students miss out. It is as convenient for me to "facilitate" or more so than a lecture class.

Would you like to receive a copy?: Yes

Additional Comments: Online/Distance education is here to stay. Students of all ages prefer it to synchronous learning for the simple reason of convenience. It is not necessarily BETTER than the traditional format, just different. The online/distance learning option in schools will allow educational institutions to increase their student base, diversify the type of student they are looking to serve, and increase the availability of their courses to a much wider potential student area. Distance learning is just one more option in an increasingly diverse educational arena. I would think it is extremely cost effective. I need no building or classroom, I meet with my students on their time and mine, without tying up the school. All my work is on paper or online with very little processing on the school's part. The testing arrangements are the only time the school is involved and as those arrangements progress to totally online, those arrangements made already will be obsolete. I teach an average of 100 students per semester as an adjunct with a full time job in secondary education. Thanks.

Course Name: The Internet - 5
 Type of Institution: CC
 Form of Compensation: Flat Rate Stipend
 Amount of Stipend: \$2000
 Percent of Time Spent: 20-25 hrs./week
 Time Compared to Trad.: Much higher for online classes
 Time Spent Teaching How: 5
 Time Spent on E-mail: 25
 Time Spent on Office Hr.: 0
 Time Spent Grading: 10
 Time Spent on Maint.: 10
 Time Spent on Interacts: 30
 Time Spent on Other: 20

Barriers: The number of students the institution assigns to the class. For online classes the number should be limited to 75% of the number that would be assigned to a F2F class. Technical problems take up a large amount of time. Student access to course materials, student problems with Admissions, Financial Aid, and other services that are available to students that are on campus become the problem of the instructor to help resolve. These things become detractors to learning for the student.

Would you like to receive a copy?: Yes

Additional Comments: The amount of time spent per student for online classes is much greater than that of the traditional F2F class. However, the student tend to complete the class with a higher level of accomplishment which may be directly related to the increased time with the instructor. The drawback is that some questions/discussions are repeated with several students in 1-on-1 sessions or e-mail discussions. I am a part time instructor in the community college system and work (full time) at a major corporation in their distance learning group.

Course Name: Introduction to Mathematical Modeling
 Type of Institution: 2Year
 Form of Compensation: Part of Regular Pay
 Percent of Time Spent: 30

Time Compared to Trad.: Higher by at least 15%.

Time Spent Teaching How:5

Time Spent on E-mail: 10

Time Spent on Office Hr.: 10

Time Spent Grading: 10

Time Spent on Maint.: 20

Time Spent on Interacts: 35

Time Spent on Other: 10

Barriers: We need to be able to stream audio and video efficiently. When connectivity problems are solved, this will remove the remaining barriers.

Would you like to receive a copy?: Yes

Additional Comments: A comment about the choice above, Participating in class interactions (chat, bulletin board, whiteboard, or any other type of synchronous communication). Bulletin board is not synchronous communication. I encourage use of the bulletin board instead of e-mail. We are a class and should communicate publicly on the board instead of privately in e-mail. I think the board should have been a separate listing in your survey--certainly not grouped with chat and whiteboard.

Course Name: Introductory Astronomy I

Type of Institution: 2Year

Form of Compensation: Flat Rate Stipend

Amount of Stipend: \$5000

Percent of Time Spent: 30

Time Compared to Trad.: normal ~20

Time Spent Teaching How:10

Time Spent on E-mail: 25

Time Spent on Office Hr.: 15

Time Spent Grading: 20

Time Spent on Maint.: 5

Time Spent on Interacts: 25

Time Spent on Other: 0

Barriers: I think that the greatest barrier is a general lack of training in this area. Students are not trained (or otherwise prepared) to take an online class in general. they have no concept of the time and self motivation needed to complete the course. Additionally, faculty are, in many cases, simply copying the same tired material over to the web for their online course. These courses can be so much more. It takes a great deal of time to put together a quality course and only a minimal amount of time to slap together a very basic course.

Would you like to receive a copy?: Yes

Additional Comments:

Course Name: COM 231 Technical Report Writing 3 hrs.

Type of Institution: CC

Form of Compensation: Stipend per Student enrolled

Amount of Stipend: \$60/\$60

Percent of Time Spent: 20

Time Compared to Trad.: It takes longer to teach on line because everything has to be done individually rather than collectively to a group.

Time Spent Teaching How:5

Time Spent on E-mail: 70

Time Spent on Office Hr.: 0

Time Spent Grading: 20

Time Spent on Maint.: 5

Time Spent on Interacts: 0

Time Spent on Other: 0

Barriers: Lack of physical contact with the students. Also not knowing if the student really completed the work and not someone else is a nagging problem. I am not sure that this method in struction reinforces good work habits. So many of the students I have had are not disciplined enough to complete the assignments much less actually finish the course.

Would you like to receive a copy?: Yes

Additional Comments:

Course Name: Juvenile Justice - 3 hour
 Type of Institution: 4Year
 Form of Compensation: Flat Rate Stipend
 Amount of Stipend: \$1500
 Percent of Time Spent: 30
 Time Compared to Trad.: higher - minimum of 40% higher than traditional course
 Time Spent Teaching How:5
 Time Spent on E-mail: 30
 Time Spent on Office Hr.: 10
 Time Spent Grading: 15
 Time Spent on Maint.: 20
 Time Spent on Interacts: 20
 Time Spent on Other: 0

Barriers: Large class sizes (if interaction will occur between instructor and student, size should be held down to comfortable level) This is difficult for universities to approve since they are mostly driven by enrollment numbers. Also, some students are not self-disciplined enough to spend the necessary time on-line and consequently miss exams, assignments, etc. which creates extra work for the instructor.

Would you like to receive a copy?: Yes

Additional Comments:

Course Name: Cancer Care 2
 Type of Institution: 4Year
 Form of Compensation: Part of Regular Pay
 Percent of Time Spent: 25
 Time Compared to Trad.: higher due to development
 Time Spent Teaching How:3
 Time Spent on E-mail: 12
 Time Spent on Office Hr.: 0
 Time Spent Grading: 7
 Time Spent on Maint.: 6
 Time Spent on Interacts: 7
 Time Spent on Other: 65

Barriers: Lack of enough support, lack of adequate reimbursement for development time, inadequate resources, inadequate graphics, outdated computer systems, lack of consistent student hardware and software requirements, technical problems getting tests to function online, lack of university acknowledging online office hours, lack of laptops to allow faculty to "teach from home", inadequate definition of "distance" education and "distance education students", misperception of time necessary to develop and teach an online course, lack of data/statistics concerning online development requirements, inadequate online course evaluation methods, lack of networking among universities, fear of loss of employment due to distance education and reduced student oncampus attendance, continued "out-of-state" tuition for distance education courses, inadequate distance education identification/designation in course bulletins and for registration and in Registrar's offices, lack of faculty time, high university committee expectations, tenure and an impetus for publication and research that may not allow a focus for distance education, rapid technological changes, inadequate funding to maintain distance education classrooms, lack of statistics revealing the actual student/participant learning that occurs in distance education/online courses compared to classroom control populations, the steep learning curve for faculty, an overwhelming sensation found in the knowledge expert who becomes the technophyte and may "lose face" in a course of "students" who are computer literate ...just to name a few items that come to mind...

Would you like to receive a copy?: Yes

Additional Comments:

Course Name: Information and Technology 5
 Type of Institution: CC

Form of Compensation: Flat Rate Stipend
 Amount of Stipend: started out pro rated then had to reach a minimum for standard part time faculty pay
 Percent of Time Spent: 10-15
 Time Compared to Trad.: probably not different
 Time Spent Teaching How: 20
 Time Spent on E-mail: 50
 Time Spent on Office Hr.: 5
 Time Spent Grading: 5
 Time Spent on Maint.: 10
 Time Spent on Interacts: 10
 Time Spent on Other: 0
 Barriers: Constant change in systems. Need to develop THEN translate to another type of course management
 Would you like to receive a copy?: Yes
 Additional Comments:

Course Name: hST103e 3
 Type of Institution: 4Year
 Form of Compensation: Stipend per Student enrolled
 Amount of Stipend: \$150
 Percent of Time Spent: 3 hours/week
 Time Compared to Trad.: ABOUT THE SAME AS REGULAR COURSE
 Time Spent Teaching How: 5
 Time Spent on E-mail: 35
 Time Spent on Office Hr.: 0
 Time Spent Grading: 40
 Time Spent on Maint.: 10
 Time Spent on Interacts: 10
 Time Spent on Other: 0
 Barriers: I don't think there are any, at least no more than in a regular class setup
 Would you like to receive a copy?: Yes
 Additional Comments:

Course Name: Learning and Assessment (3)
 Type of Institution: Graduate
 Form of Compensation: Part of Regular Pay
 Percent of Time Spent: 10
 Time Compared to Trad.: about the same
 Time Spent Teaching How: 5
 Time Spent on E-mail: 35
 Time Spent on Office Hr.: 20
 Time Spent Grading: 15
 Time Spent on Maint.: 10
 Time Spent on Interacts: 15
 Time Spent on Other: 0
 Barriers: Translating traditional lecture/discussion classroom experience to combination of async and sync teaching. Preparation and maintenance of web-based materials far exceeds comparable time for lecture-based courses, leaving less time for service and research.
 Would you like to receive a copy?: Yes
 Additional Comments:

Course Name: 10 courses: Computers in Ed3cr;Intro to Instruct Tech3, Intro to Virtual Reality3, VR in Ed3, Using WWW for Research3, Intro to Librarianship3, +4 undergrad online courses
 Type of Institution: Graduate
 Form of Compensation: Part of Regular Pay

Percent of Time Spent: 100
 Time Compared to Trad.: higher-I am teaching more courses now and have no release time for research
 Time Spent Teaching How:5
 Time Spent on E-mail: 60
 Time Spent on Office Hr.: 0
 Time Spent Grading: 15
 Time Spent on Maint.: 20
 Time Spent on Interacts: 0
 Time Spent on Other: 0
 Barriers: I need to sleep and eat. I have developed 10 online courses, with online textbooks for 8 of them. I teach about 100 students online in 4 or more courses each semester & summer session. Lack of time to do anything else is the greatest barrier. To teach this many, right, one has to give up almost all other activities. It's very labor intensive.
 Would you like to receive a copy?: Yes
 Additional Comments:

Course Name: Business Law (3)
 Type of Institution: 4Year
 Form of Compensation: Part of Regular Pay
 Percent of Time Spent: 20
 Time Compared to Trad.: Percentage is higher. Traditional teaching about 15%
 Time Spent Teaching How:10
 Time Spent on E-mail: 20
 Time Spent on Office Hr.: 10
 Time Spent Grading: 5
 Time Spent on Maint.: 20
 Time Spent on Interacts: 20
 Time Spent on Other: 15
 Barriers: Accessibility to working computers and reliable programs. This is greatly diminishing as the cost of computers goes down.
 Would you like to receive a copy?: Yes
 Additional Comments: I assume that course maintenance includes ongoing development of the course materials (not part of the design and initial development).

Course Name: Finance 323E, Principles of Business Finance, Finance 330E, Real Estate Finance
 Type of Institution: 2Year
 Form of Compensation: Stipend per Student enrolled
 Amount of Stipend: \$70 / \$70
 Percent of Time Spent: 50-60%, ran well past 40 hours
 Time Compared to Trad.: Significantly higher. The online course takes more than twice the time a classroom course takes.
 Time Spent Teaching How:5
 Time Spent on E-mail: 23
 Time Spent on Office Hr.: 5
 Time Spent Grading: 60
 Time Spent on Maint.: 2
 Time Spent on Interacts: 5
 Time Spent on Other: 0
 Barriers: (1) The ability of the student to discipline him/herself to the rigors of working independently. Students are surprised at the amount of work it takes for them to read a chapter, work a problem, send a message, etc. I believe that is the main reason that many students enroll then drop the course after a few weeks. They don't want to do what is needed to complete the course.
 (2) Technological ability of the students is a partial barrier (I used to think it was the most important, but that has changed.) After almost four years of teaching online technological problems have diminished as I have become more educated on what some of the causes are and as the University has risen to the challenge and increased its

technology staff of experts to help professors manage the problems, etc. It is still a barrier, but not a significant one, unless the student is not a computer oriented student. We still have a lot of those.

(3). Comment. Marshall has made a significant contribution to the development and teaching of electronic courses. It has provided maximum technical support of the highest caliber. It has fallen very short of funding the different programs to the level needed to make them an international success. When that barrier is overcome, MU will lead even more than it is now leading.

Would you like to receive a copy?: Yes

Additional Comments: Brian, keep up the good work. Thanks for everything you did for me.

Course Name: Basic Economics 3 hours
 Type of Institution: CC
 Form of Compensation: Stipend per Student enrolled
 Amount of Stipend: \$40/c.hour 1/2 1/2
 Percent of Time Spent: I did all course-work at home as an over-load, perhaps 10 percent of time: about 10 hours per week.
 Time Compared to Trad.: the time spent is about the same per course (e-course or traditional course)
 Time Spent Teaching How: 5
 Time Spent on E-mail: 50
 Time Spent on Office Hr.: 10
 Time Spent Grading: 5
 Time Spent on Maint.: 5
 Time Spent on Interacts: 10
 Time Spent on Other: 15

Barriers: 1. The students weakness in computer skills.

2. The enrollment system at Marshall for the course. But I think great improvements are developing in this area. Brian Morgan has been tremendous helping with student enrollment. In fact Brian is one of the most knowledgeable people I know in the use of computers and WebCT. Without Brian Marshall would be lost.....

Would you like to receive a copy?: Yes

Additional Comments:

Course Name: OT 151E Medical Terminology 3 credit hours
 Type of Institution: CC
 Form of Compensation: Stipend per Student enrolled
 Amount of Stipend: \$60 / \$60
 Percent of Time Spent: 8hrs/wk
 Time Compared to Trad.: lower/approx. 25% lower due to no actual teaching, only grading, advising, and responding.
 Time Spent Teaching How: 0
 Time Spent on E-mail: 25
 Time Spent on Office Hr.: 25
 Time Spent Grading: 50
 Time Spent on Maint.: 0
 Time Spent on Interacts: 0
 Time Spent on Other: 0

Barriers: I'm not sure this qualifies as a barrier, however, I feel the greatest problem is or could be the course integrity. We depend on Proctors to administer test, therefore the course's integrity depends on the honesty of the Proctors and students. I am not sure this is as it should be.

Would you like to receive a copy?: Yes

Additional Comments:

Course Name: COM 111E - Communication I - 3
 Type of Institution: CC
 Form of Compensation: Stipend per Student enrolled
 Amount of Stipend: \$60/\$60
 Percent of Time Spent: 24

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Time Compared to Trad.: Significantly higher PER STUDENT. Last semester, for example, the course required the 24% of my time, but only one student out of fifteen finished on time. Near the end of the semester, some dropped. The rest took incompletes.

Time Spent Teaching How: 5

Time Spent on E-mail: 20

Time Spent on Office Hr.: 0

Time Spent Grading: 70

Time Spent on Maint.: 5

Time Spent on Interacts: 0

Time Spent on Other: 0

Barriers: I am teaching a course that I had no part in designing; thus, much of the course simply isn't "me." The course designer transferred the content and structure of the traditional version of this course into the WebCT format with no accommodation for the special opportunities and challenges of teaching in this environment. As a result, I am constantly frustrated with forcing a square peg into a round hole. Because I am an adjunct, I cannot tamper with the course web pages to make minor content changes. I have to request that someone else do that. Nor can I apply for a grant to overhaul the course to make the major changes that are badly needed. This disjunction between the instructor and the course is the greatest source of frustration for me and the greatest barrier to effectively teaching this course online. Following that, the greatest barrier is the perception among most of my students that 'online' is synonymous with 'anytime'. Structure, sequence, deadlines, turn around time, and other similar constraints of traditional classes do not apply to online courses.

Would you like to receive a copy?: Yes

Additional Comments: There is much opportunity in higher education to reach underserved and difficult-to-serve students by offering courses online. I have enjoyed working with some highly motivated and competent students. Most of my students, however, are looking for an easy alternative to a traditional college classroom and lack sufficient motivation, self-discipline, and desire to learn. I have less motivated students in traditional classrooms as well, of course. But I lose few students through the semester in my traditional classrooms; I lose most of my online students. When students do not finish, not only do I miss the satisfaction of helping them achieve, I miss the second half of my payment for working with these students, regardless of how far they have progressed in the course or how much time I have spent with them.

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Appendix E

Faculty Gap Analysis Survey



MUOnline

Online Courses offered by Marshall University
Using WebCT

Flashlight Faculty Gap Analysis

Name

Rate your ability to do each of the following:		No Expert Knowledge/ User Ability			
(Check the appropriate number, from 1-no knowledge/ability to 5-expert user)					
0199F146	Send or receive e-mail	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
		<input type="radio"/> 5			
0199F147	Search for information on the Internet/World Wide Web	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
		<input type="radio"/> 5			
0199F150	Create or edit a World Wide Web site	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
		<input type="radio"/> 5			
0199F152	Use the product WebCT	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4
		<input type="radio"/> 5			

Comment Area - Please provide us with any information regarding your needs for ongoing faculty development or issues that you would like to have addressed regarding the use of WebCT.

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Appendix F

Flashlight Student Current Inventory Survey



MUOnline

Online Courses offered by Marshall University

Name

Student ID

Course Taken:

Student Academic and Demographic Items

1. Please enter your age in the space provided. Age:
2. Sex: (select the appropriate circle) Male Female

Academic Goals

3. What is the highest degree you have earned from any college or university (mark the appropriate circle, select only one)?

<input type="radio"/> Certificate	<input type="radio"/> A.A. or A.A.S.	<input type="radio"/> B.A. / B.S.
<input type="radio"/> M.A. / M.S.	<input type="radio"/> Ph.D. / Ed.D.	<input type="radio"/> J.D.
<input type="radio"/> M.D.	<input type="radio"/> Other (please specify) <input type="text"/>	<input type="radio"/> I don't expect to earn a degree

4. At the beginning of this course, rate your knowledge of how to use WebCT where 1 is 'no knowledge and 5 is an 'expert user': (select only one)

- 1 2 3 4 5

5. The pace of the training provided on the use of this technology for this course was: (select the appropriate circle, select only one)

- Too fast for me to follow
- Just right
- Too slow
- No basis for judgment or no opinion

6. Do you take this course primarily: (select only one)

- at home?

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- at your place of employment?
- at the main campus?
- at a community distance learning site (such as a library)
- at a remote campus?

7. Why did you decide to take this course (mark the appropriate circles for all that apply)?

- to fulfill a general education requirement
- fulfill a requirement for my major
- the subject matter looked interesting
- the instructor has a good reputation
- it was offered at a convenient time
- it was offered at a convenient location
- it was offered via online technology
- Other _____

Instructional Strategies

In a typical week during this semester, approximately how much time did you spend in each of the following activities for this course?		(mark only one response per question)			
		Ten Hours or More	Six to Nine Hours	Three to Five Hours	On
8.	Interacting with an instructor or other students at Marshall University by way of E-mail or other "time-delayed" electronic communication (such as bulletin boards or discussion lists)?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
9.	Interacting with someone outside your institution (such as a stranger, a former instructor/teacher, a content expert, a peer) by way of E-mail or other "time-delayed" electronic communication (such as bulletin boards or discussion lists)?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
10.	Interacting with an instructor or other students at your institution by way of a chat group or other "real-time" electronic communication (simultaneous, multi-user computer discussion) for this course?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
11.	Interacting with someone outside your institution (such as a stranger, a former instructor/teacher, a content expert, a peer) by way of chat group or other "real-time" electronic communication (simultaneous, multi-user computer discussion) for this course?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
12.	Electronically searching Marshall University library catalog from a remote site (such as home, a community library, a remote/community learning center, etc.)?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
13.	Searching the Internet/World Wide Web to access reference materials and/or conduct research?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

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14.	Accessing the <u>Internet/World Wide Web</u> to view or download course materials, view a multimedia presentation, use a self-paced instructional program, pick up and/or complete assignments, or take an examination?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
-----	---	-----------------------	-----------------------	-----------------------	--

Learner Interaction and Feedback

Indicate how strongly you agree or disagree with each of the following statements:		(mark the appropriate circle question)		
		Strongly Agree	Agree	Dis
15.	Assignments for <u>this course</u> were stimulating.	<input type="radio"/>	<input type="radio"/>	
16.	I am more comfortable participating in discussions in <u>this course</u> , than I am in other courses.	<input type="radio"/>	<input type="radio"/>	
17.	The emphasis on working in groups in <u>this course</u> has helped me to understand the ideas and concepts being taught.	<input type="radio"/>	<input type="radio"/>	
18.	<u>This course</u> taught me how to work in a team/group to complete a project.	<input type="radio"/>	<input type="radio"/>	
19.	I received comments on assignments or examinations for <u>this course</u> quickly.	<input type="radio"/>	<input type="radio"/>	
20.	The instructor for <u>this course</u> returns graded assignments quickly.	<input type="radio"/>	<input type="radio"/>	
21.	The instructor for <u>this course</u> gives useful comments on assignments.	<input type="radio"/>	<input type="radio"/>	

I would recommend that others take a course that:		(mark the appropriate circle question)		
		Strongly Agree	Agree	Dis
22.	uses electronic communication, such as electronic mail, chat rooms, Bulletin Boards and/or computer conferencing.	<input type="radio"/>	<input type="radio"/>	
23.	uses WebCT	<input type="radio"/>	<input type="radio"/>	
24.	uses materials (course modules, multimedia texts, etc.) on the World Wide Web Internet	<input type="radio"/>	<input type="radio"/>	

25. Overall, I have been

- Very Dissatisfied
- Dissatisfied
- Satisfied
- Very Satisfied

with this course

26. List below the three things that are the greatest barriers to your successful use of (name of specific

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technology inserted here) as it was used in this course (please list in order of priority)?

1.

2.

3.

27. Please use this section for additional comments:

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202-752-1844



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