

A CASE STUDY FROM GOLDEN GATE UNIVERSITY: USING COURSE OBJECTIVES TO FACILITATE BLENDED LEARNING IN SHORTENED COURSES

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ABSTRACT

This paper discusses utilizing course objectives to drive the change of existing 10–15 week undergraduate courses into 8-week courses that feature blended learning tools. To begin the redesign process, instructors and a faculty mentor revisit course objectives for currency, and with an eye toward blended course restructuring. The restructuring is overseen to ensure that standards are met. The resulting course redesign has overarching objectives and weekly objectives tied directly to weekly activities, many of which are blended.

In addition to blended tools, the courses are considered blended as to modality in that while there is a weekly face-to-face meeting, there is also a fixed expectation for out of class work, where blended tools find good use. An approach to using blended tools as bridge activities between “last week” and “next week” is also presented.

The redesigned classes are proving satisfactory to students and teachers; no differences in student course evaluations with respect to course quality are noted. Some students indicate there is “more work”, which is perhaps a function of the need to better manage student and faculty time management expectations.

The redesign has been so successful that it we intend it to become a fundamental institutional faculty development tool.

KEYWORDS

Case, Objectives, Redesign, Faculty Development, Blended, Blending, Modalities, Objectives, Online, 8 Week Courses

I. INTRODUCTION

This paper discusses utilizing course objectives to drive a change of existing 10–15 week undergraduate courses into 8-week courses, featuring blended learning tools. Course length was and is being adjusted from 10 and 15 weeks to 8 and 16. Some courses are taught exclusively online, some face-to-face. Irrespective of mode, all courses are expected to have a Web component, known in our environment as “web enhanced.” In addition to our commitment to using blended learning, our redesign process is driven by our attention to course objectives as the entry point to the redesign process.

Course objectives are a given in learning environments, so they are a reasonable focus for redesign. It was

initially assumed that those objectives would be merely a jumping off point for course redesign, but this proved to be only partially the case. In fact, revisiting course objectives proved to be a central impetus to both course redesign and overall course improvement.

This process, one that leverages objectives and the commonalities of both online and face to face teaching environments, and that incorporates blended learning skills and tools, is now nearly completed, and that process is described in this paper. Our success in this process leads us to believe that we can enlarge the scope of this effort to become a significant component of faculty development in our school.

II. SETTING

Golden Gate University (www.ggu.edu) is a private institution in San Francisco with an over 100-year history in fields of tax, law and business. We are the largest provider of MBAs in the San Francisco Bay area. Like many schools, we began offering online courses several years ago, and have evolved to providing multiple degrees online via our Cybercampus. The institution is fully accredited by the Western Association of Schools and Colleges. The university's mission states that the university "is an independent center of in-person and virtual learning that changes the lives of adult students through professional practice degree, certification and life-long learning programs in business, law, tax, technology and related professions." A keyword in the mission statement is "adult." The average age of both graduate and undergraduate students is over 30. Eighty percent of our courses are taught by adjunct faculty, many of whom are working in their fields of expertise. An increasing number of our students take courses or full degrees via our Cybercampus, and although they continue to say they prefer face-to-face courses, in increasing numbers they are choosing the Cybercampus.

Two additional and important factors are at play in our blending effort: student expectations for a "rich" course experience, even in the Cybercampus, and the ongoing need to improve the quality of teaching. Our students are by and large working people who are technologically savvy, and who often use fairly sophisticated technology systems for personal use and at work. Eighty percent of our courses are taught by adjunct faculty, most of whom have had little or no teacher training other than what is provided by an institution at which they teach. Historically, the success of our courses was driven by the expertise of the faculty, but over time, younger and newer students expect that their learning experience be technology-mediated and carefully managed. Being a dynamic face-to-face lecturer is no longer a guarantee for a successful class, and interpersonal presentation and content skills do not necessarily translate to a successful Cybercampus class.

Until recently, improvements in online teaching pedagogy and tools have reached our faculty sporadically. Our Cybercampus course designers are talented, and are engaged in helping online teachers present courses that are educationally sound and well managed. However, this essentially one-on-one approach to course design is less than satisfactory in creating a sea change in the look and feel of our online courses. Further, as the lines between online and face to face classes continue to blur, teachers need new skills that find fit with the expectations of value and time-conscious students.

III. ISSUES

Institutional research on contemporary students and current educational practices led us to understand that course length is an issue for many students. Many institutions successfully offer shorter course lengths, and research on student expectations, particularly of adult learners, suggests that these are attractive to our students as well.

Our institution had (and still does) offer courses in various lengths. Most graduate courses continue to be offered in the 16 week format, and for a period of time, we offered some 10 week courses, which were popular with both instructors and students. However, because of financial reporting issues, those could not be continued. The previous course lengths provided problems specifically with student financial aid reporting; with both 15 and 10-week semesters, the university appeared to have a 3 and 5 term semester structure, which could not be reconciled with lenders. With 8 and 16-week course lengths, the courses overlay one another neatly, removing the problem. 8 week courses created several advantages. Students could perhaps take several courses in the same time frame. A desired institutional outcome is that students would raise the average units taken per semester, and the 8 week offerings were considered a way to accomplish this. We wanted to avoid both the appearance and reality of merely compressing courses. The 8 week courses had to be fully featured, comprising the same content, teaching tools and expectations of student performance as other, longer courses. Using blended learning tools and approaches was, and is, a way to accomplish this.

This fact was one driver for a grant proposal that was submitted and funded by the Alfred P. Sloan Foundation. Since more students are opting for the Cybercampus courses, and we had also determined to shorten some course lengths, it seemed appropriate to seek assistance for this effort in incorporating a blended learning approach. Our original Sloan proposal stated that

The overarching project goals are to increase adult working students' access to GGU undergraduate and graduate degree programs in business-related fields, by:

- (a) increasing anytime/anywhere learning,
- (b) decreasing commute time, and
- (c) condensing course term-length.

To improve the quality of education provided by the university, by transforming significant numbers of courses now offered in all online or all in-person formats to blended formats.

IV. COURSE REDESIGN

The first stage in the redesign process has been for a faculty mentor to meet with a teacher to discuss course content, currency and other general matters. This stage-setting step allows for informal information exchange among participants, but it provides the mentor with a course and teacher perspective that is important.

Next, course objectives are discussed. Objectives remain the purview of the instructor, but shaping those objectives occurs in concert with the faculty mentor and our online (Cybercampus) course designers.

As we began to work with teachers, we quickly discovered several things. Most course objectives had been codified years earlier, and while course content is nearly always updated, course components such as the objectives were handed down from semester to semester and instructor to instructor, often without review and with only cursory changes. Another finding was that most instructors had foggy notions of what objectives are. As a result, revisiting objectives became a focus of initial work with instructors.

A. Bloom and the Action Verb Approach

Benjamin Bloom's Taxonomy [1] remains an important tool in our arsenal. While it has been somewhat revised by one author for new millennium currency, its basic tenets remain.

For our work in revisiting objectives, we chose the "action verb" approach, noted by Overbaugh and Schultz [2]:

Remembering: can the student recall or remember information?

Verbs: define, duplicate, list, memorize, recall, repeat, reproduce, state

Understanding: can the student explain ideas or concepts?

Verbs: classify, describe, discuss, explain, identify, locate, recognize, report, select, translate, paraphrase

Applying: can the student use the information in a new way?

Verbs: choose, demonstrate, dramatize, employ, illustrate, interpret, operate, schedule, sketch, solve, use, write

Analysing: can the student distinguish between the different parts?

Verbs: appraise, compare, contrast, criticize, differentiate, discriminate, distinguish, examine, experiment, question, test

Evaluating: can the student justify a stand or decision?

Verbs: appraise, argue, defend, judge, select, support, value, Evaluate

Creating: can the student create new product or point of view?

Verbs: assemble, construct, create, design, develop, formulate, write.

B. What We Found: Awakening "Sleepy" Objectives

An example of the kind of objectives we often found is presented below, from a course in information technology security:

In general, how well has the course contributed to your understanding of the development of protocols and procedures designed to minimize business and enterprise risks associated with disasters and other major disruptions.

To what extent do you have a better understanding of

- 1) how to write a disaster plan.
- 2) the importance of rapid response and business recovery.
- 3) how to identify critical business functions.

First, note that these are not learning objectives. They are a list of questions to the student, asking for an assessment his/her own learning on several aspects of course content.

While this objective structure did reflect general expectations for student learning, it did nothing to state expectations for either student learning or criteria for assessment of the learning.

The finding that many of our courses had such objectives was somewhat startling, but not completely surprising. It did make us realize that determining actionable objectives had to be consistently addressed at the front end of our work with faculty.

Here are “awakened” objectives for the same course (underlining added):

Students will articulate the importance and role of rapid response and business recovery to the contemporary business.

Students will compare/contrast components of disaster and recovery plans.

Students will identify critical business functions and structure disaster and/or recovery plans accordingly

Students will describe alternative business operations, including virtual continuity and collaboration with inter-company business-continuity planning teams.”

As further illustration, here is an additional set of course objectives, from our Information Technology Management (ITM) 185 Networking course. Underlining is added:

“This course will provide you with knowledge and skills in network security in the context of networks, information and computer systems.

1) By completing the first part of the course, understanding LAN Internetworking Standards and Fundamentals, students will be able to evaluate existing networks and explain how standards and connection-oriented services are utilized when managing network communications. .

2) By completing the second part of the course, WAN communications, students will compare the LAN standards and fundamentals they learned in part one with WAN communications protocols and standards used in today’s global networks.

3) By completing the third part of the course, Bridging and Switching concepts, students will have the skills necessary to distinguish between different bridged and switched network traffic solutions, and have the ability to analyze network designs and determine which types of bridging and switching solutions would best serve to manage each network's communications needs.

4) By completing the fourth part of the course, Internet and Routing protocols, students will have the ability to assess network addressing schemes and troubleshoot networking address problems. Students will also be able to evaluate routing protocols according to different network traffic practices and demands, and propose which types of routing practices are best suited for specific network demands.

C. From Course Objectives to Weekly Objectives

The next step in the redesign is to connect overall course objectives with weekly activities, so that macro objectives carry over into the student's homework, exams, and into course projects.

Here is an example of a revised weekly overview and objectives from week 6 of the same ITM 185 course:

Overview: This week's lesson examines the TCP/IP protocol suite and IP addressing. By the end of this lesson students will have a strong understanding of the operations of TCP and IP, core protocols in the suite, and several other important protocols in the stack. IP version 4 addressing is also evaluated in detail, as well as the purpose and application of the subnet mask value. . . .

Objectives:

By completing Lesson 6 the student will be able to perform the following and more:

Explain the basic history and evolution of the TCP/IP protocol suite

Analyze where TCP/IP protocols are found in the stack, and where they relate to comparable layers in the OSI model

Examine an IP packet structure

Classify the different IPv4 class addresses

Identify how many addresses are available for different IP class addresses

Describe a subnet mask with both decimal and binary values

Analyze an IP address and its subnet mask and determine which part of the address represents the network and which part of the address represents the node

Discuss the purposes and practices of the ARP and ICMP protocols

Provide a thorough explanation of the features provided by the TCP connection oriented services

Compare transport layer protocols TCP and UDP and identify which applications would best utilize each transport protocol.

Name several protocols that are found in the TCP/IP application layer.

It can be seen that the revamped objectives alone can provide a much stronger focus to the course. As well, this activity tends to reinvigorate the teacher, giving him/her new ways to think about the course. In short, working with objectives alone has proven highly satisfactory to mentors, developers and teachers.

D. Revisiting Course Projects and Research Papers

As we found with course objectives, the same situation existed with objectives for research projects. Here is a very typical example of a research paper assignment:

Write a 15-20 page paper on a topic from our course. Following is a list of potential topics:

Submit your paper on week 15 of the course

Don't plagiarize!

This of course gives neither the student nor the instructor any criteria for creating or evaluating the paper, or any assistance in creating a context or setting for that work. Here is a redesigned assignment for a research project (underlining added):

Objectives: To apply course material and technology savvy to one, or several, solutions to the problems exhibited at American International Bank. Articulate the solution(s) in writing as you would in a business proposal.

What should you (the student) do?

Identify a business problem

Articulate an institutional strategy and tactics to address it

Identify and discuss the business and technology solution(s) that will address the problem

Explain specific benefits of your proposed solution

V. BLENDED LEARNING

The above material summarizes our work with objectives as a focus in course redesign. Given that we were shortening courses from 10–15 weeks to 8, it can be seen that objectives provide a much stronger framework for a shortened course, assisting in teaching, learning and assessment outcomes. While the work with objectives proved to be more important and time consuming than was originally thought, it was helpful in moving us into the integration of blended learning tools. This section discusses that effort.

Most redesigned courses have both Cybercampus and face to face sections, taught in the same semester by the same teacher, which has made both redesign and coordination /implementation somewhat easier. This also means that participants are able to see in real time how tools can work, or must be modified, to accommodate both formats.

Students are able to choose between Cybercampus and face-to-face classes, depending on their locations, time constraints, family and work schedules. Face to face courses are always offered at the San Francisco campus and less often at distance campuses, so the Cybercampus is favoured by distant students and those local students who prefer the online modality.

“Blended” has somewhat separate applications for different course modalities. In a face to face course, students meet for a regular length class session (2 hours and 40 minutes) once a week. Out of class activities are expected to comprise the remainder of that time. Homework and readings are often loosely used for out of class work. Given that such out of class work in an 8 week course is a significant part of the contact hour structure, we intended that this time should be well used, and supported by blended tools.

In the Cybercampus course, students never meet face to face. It is a completely asynchronous environment, consisting of text or audio lectures and supplementary material, online discussions and assignments. These courses are of a blended modality by nature, given their combination of elements, and use some blended tools in the courses’ basic form.

A. Blended Tools

Irrespective of mode, we encourage the use of blended learning tools. Examples of those tools are:

1. Email

Email and group discussions in the Cyber shell are an integral part of the Cybercampus courses, and Cyber shells (a Cybercampus environment) are also available for teachers and students in f2f courses. The threaded discussions are used to have conversations among students and teacher on any number of topics, both on content and other course matters.

2. Internet and Web

Supplementary information on content and concepts, computer system demos (particularly useful), and student-generated information.

Web-based or downloadable videos are very engaging for students, and their use should be encouraged. There are many of these online, although sometimes they are difficult to find. Another tool, YouTube, is particularly attractive to teachers and students, although some assistance should be provided in searching video content appropriate to the course needs.

3. Student-created Audio

The concept called “podcast” has captured student imagination, so students are willing these days to create mp3 audio. These are useful for ad-hoc communication, and for students to provide soundtracks for PowerPoint or other documents.

There are several free or low cost audio tools available for Windows and Macintosh platforms. Students and teachers, however, still approach these somewhat differently. Teachers are often somewhat ashamed to admit that they don’t know how to create audio, while students are eager to learn, but less interested in expending resources in finding software and purchasing a microphone/headset.

4. Teacher-created Audio

Faculty members frequently record lectures and mini-commentaries for students. These are easily uploaded, and should feature a corresponding text. Students periodically comment that “it’s nice to hear the teacher’s voice” in evaluation comments.

5. PowerPoint

The ubiquitous PowerPoint is a powerful blended tool for the classroom, with the caveat that the teacher should be very clear on the objectives and purposes for its use. The tool works well in both f2f and online classes, but the teacher should provide evaluation criteria and context for use. For example, students should know the number of desired slides for a given presentation time frame, the amount of material per slide, the appropriate background and effects, the audience for the presentation, and the purpose.

PowerPoint also allows for adding audio, but resultant files are large. If computer and media memory is not an issue, PowerPoint with audio works, but what is also doable is a non-audio PowerPoint combined with a separate audio, which creates much smaller files and easier management.

6. Social Networking Tools

Instructors and students are increasingly using Weblogs and WIKIs for course activities. A web search will quickly show you any number of free sites for their creation.

Weblogs for the faculty member may or may not be appropriate to a class, although students may be interested in creating a blog for a specific course purpose, or inviting classmates to visit an existing blog. WIKIs have more immediate application. These can be used as a kind of knowledge management tool, where files can be stored for a particular workgroup, or the class, and discussions can occur.

B. Using Blending Tools as Pedagogy to Bridge Class Sessions: From Last Week to Next Week

One of the ways blending tools have proved powerful is as a pedagogical tactic to connect a previous class with a following class. Recall that in the 8 week model, out-of-class activities are intended to play more than a supporting role. Teachers are always interested in reinforcing or amplifying taught material as a way to assess learning and to further engage students. Blended tools can help accomplish this purpose.

A second approach is that teachers can use blended tools as a way to engage students in material that has not yet been taught, e.g., “next week’s work.” Taken together, the out-of-class activities serve those masters, reinforcing last week’s work and foreshadowing what comes in the next session, as Figure 1 suggests:

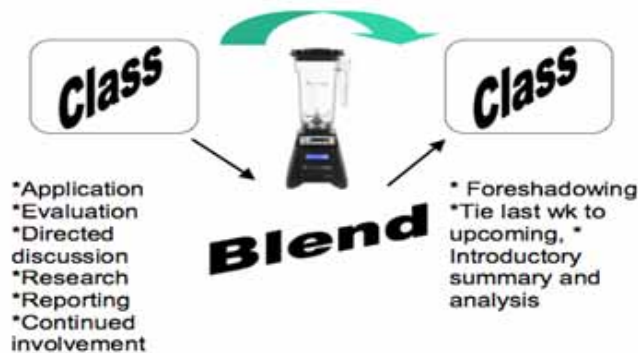


Figure 1 Class-to-class Blending Approach

C. Example Class Session Bridging Activity

As an example bridging assignment, consider the following activity:

This week in class, we discussed Enterprise Resource Planning systems in the contemporary business. You have two jobs before our next class.

First, create a proposal for an ERP system for a business, to be delivered to a C-level management team. This proposal summarizes your belief that an ERP system can solve a particular problem, but demonstrates your understanding that such systems also have problems. Utilize any number of supplementary tools: online demos, Web searches, podcasts.

The second part of the assignment is to complete a preliminary research into next week's work on Customer Relationship Management (CRM) systems. Summarize and describe what they are, how they work, and what marketing, sales and general business functions they fulfil. Include your work and any supplementary audio/videos (demos) that you find on our course WIKI, under the discussion "CRM".

Here are the specific outcomes intended to be accomplished with the above between-class assignment, which can avoid the usual "For next week, read Chapter 5 and answer the questions at the end."

Revisit past learning (last week, summary)

Integrate current (analysis, interpretation, translation for classmates, creating transparency)

Foreshadow (upcoming content; thoughtful reading and summary, aimed at student interest and knowledge; students summarize and share for self-learning and for classmates)

VI. WHAT WE'VE LEARNED

Combining objectives and blending activities in course redesign has proved to be very beneficial for the participants, for students, and for the quality and overall look-and-feel of the courses involved. While we do not have specific assessment-level data yet, students and teachers have been enthusiastic, and we have all learned from each other in the process.

Participating faculty members are supportive of the changes in the courses. Of course, they are expected to teach for fewer weeks, but they have been positively impacted by the assistance of faculty mentors and Cybercampus personnel in reshaping the courses. Virtually all participants report that their sense of involvement with the course and their ability to teach the course better than before have been positive outcomes for them.

Student satisfaction in these newly blended courses, as measured by course evaluations, has not been measurably affected. There are a number of metrics addressed by questions to the students who reply both by comment and by rating on a 1–5 scale. Courses being well taught (students like the teacher and content) typically receive an average score of from 4–4.75. Less favored courses and teachers can receive scores from 2.5 to 3.9. Students are encouraged to provide written comments as well.

During the last several semesters, we have tracked course evaluation scores and found little deviation from historical norms. We do periodically get comments such as “this is a lot of work for 8 weeks.” However, we continue to publicize that these courses are full courses, and not “condensed” or “experimental.”

Blended-mode courses provide an attractive approach for corporate clients. We are currently involved in an onsite cohort MBA program with a pharmaceutical corporation, in which 2 courses alternate during a 16 week period. This is satisfactory to management, and satisfactory to students, who are talented and highly motivated, and are able to make the most of this time-saving but challenging blended modality arrangement.

VII. CONCLUSIONS

The redesign process has proven so successful that a faculty team charged with addressing our existing faculty development structure strongly supports having the objectives-driven blended approach discussed in this paper become a central part of our faculty development activities

We shouldn't overlook the benefit to the faculty culture. Too often, teachers, particularly adjuncts, come and teach without much interface with the university at large, and, sadly, with other faculty. This development process is serving to create a greater communicative interface among faculty, mentors, and course developers.

It is envisioned that group course development activities can be undertaken on a semester basis, allowing for people and groups to come together for the common purpose of teaching/learning improvement. Our experience until now suggests that this will create a positive change on the larger culture that should ameliorate some of the current distancing felt by some faculty.

Faculty development is directly related to quality, which is directly related to student/client perception of our institution, so we believe that our faculty development efforts must enjoy real financial and time resource support on an ongoing basis. The committee on faculty development has created a proposal that was recently forwarded to our Vice President of Academic Affairs for consideration, and it has been adopted. We intend that our success with creating 8 week blended courses will now become a major component in our faculty development schema.

VIII. REFERENCES

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IX. ABOUT THE AUTHOR

Dr. Robert Fulkerth is department chair of the Operations and Information Technology Management Department in the Ageno School of Business at Golden Gate University, where he has worked since 1991.

He is a pioneer in the school's online learning faculty, having taught English courses in an early bulletin board environment. He has taught using the Cybercampus (eCollege) system since its introduction. He is a leader in faculty-side online pedagogy, course configuration, blended learning, course management and colleague mentoring.

He was and is a faculty implementer in the mentioned 8-week blended course redesign, and chairs the Faculty Development Committee, a subcommittee of the Faculty Senate, which is currently revisiting the entire university faculty development process, a great part of which will comprise implementation of the objectives-driven blended learning approach.