

Developing, Teaching and Assessing Hybrid English Courses while Integrating the SAMR Model

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Abstract

A study examining the creation, implementation and student assessment for a hybrid course was performed at a private, Catholic University in the south Pacific. Students enroll from the Hawaiian Islands, and communities across the Pacific, including Micronesia and Samoa. The dispersion of student populations, and the challenging topography of the island, have encouraged new pedagogical approaches that mix the university's online pedagogical models with its mission to engage students in small classrooms with close student-instructor engagement. One solution has been the creation of hybrid, or blended, classes, that mix traditional classroom instruction and online teaching methods in a roughly 60-40% ratio respectively. This paper will present the methodology of constructing a hybrid class, the pedagogical theoretical framework of the SAMR model and findings from a study examining the student outcomes.

Keywords: Blended learning, Hybrid learning, Assessment, Instructional Design, SAMR model

Introduction

The study site is a small, private, Catholic university in the south Pacific. The university serves students from the islands of Hawaii, and island chains throughout the Pacific, including Micronesia and Samoa. The university emphasizes small class sizes and a low instructor-to-student ratio, encouraging strong classroom engagement, the development of interpersonal communication, and the building of communal learning environments. In addition, Chaminade offers distance learning opportunities, including full online programs and individual classes. However, a new initiative is attempting to marry these two approaches - live classroom and online teaching - to produce a new pedagogical approach that maximizes both experiences. We operationally define this blended approach as "hybrid" teaching. This paper is a case study of two English classes that are pioneering this approach and testing its validity within the university's mission of a close instructor-student dynamic.

Two sections each of English 102: Expository Writing and English 201:Types of Literature courses were taught using a hybrid method of live and online delivery of class material. The purpose of these courses are to fine-tune critical reading, writing, and research skills essential for postsecondary academic scholarship. The courses present a variety of strategies for writing and research, including creating, drafting, evaluating, and presenting information. Students create sustained persuasive and analytical writing projects using library and Internet research. Writing assignments in this course focus upon expository essays. They also concentrate on various research and writing methods, including but not limited to summarizing, paraphrasing, quoting, evaluating, and synthesizing from research sources.

The final course papers for both classes allow students to demonstrate the ability to write a multi-source research paper.

These classes ran almost identically to full live classes, with the percentage of live material reduced and the percentage of online material increased. The typical Chaminade University class schedule operates either Monday-Wednesday-Friday (50 minutes each), or Tuesday-Thursday (1 hour and 15 minutes each). These courses were conducted Monday-Wednesday live, and Friday online. The class used eCollege Learning Management System (LMS) platforms in all classes. Monday and Wednesday classes were treated like regular live classes, with homework provided for each class. On Fridays, the students were expected to access an assignment that would take them roughly a class period, which would only be available on Fridays through the LMS. If the student misses the Friday component, it is treated like a class absence. The following Monday class is then designed to relate to the previous Friday's homework, in order to provide continuity. In addition to the Friday assignment, there is a separate homework assignment due for Monday's class, usually involving a guided reading and response through a threaded discussion (blog) in the LMS.

Literature Review

Blended/Hybrid Learning

Perhaps, an important step towards completely on-line distance (distributed) learning was the creation of blended and hybrid courses (Allen, Seaman, & Garrett, 2007). The discussion of blended and hybrid courses began decades ago, primarily with the hopes of reducing institutional costs and addressing the universal issue of limited classroom space and availability (Heler, 2010). A common structure in higher education is a course schedule of either Monday, Wednesday and Friday, or a Tuesday/Thursday meeting time. Scheduling has always been problematic because of the domino effect; when one instructor attempts to move their course day or time, this naturally affects all other courses, perhaps across the week. The initial hybrid approach took a simple approach and suggested doubling two courses during the same timeframe and classroom, one meeting on a Tuesday, the other on a Thursday. The day on which classes did not meet formally would be addressed either with physical informal meetings, or synchronous virtual meetings via the newly established institutional Learning Management System (LMS) (Graham, 2006). Most LMS's contained a password-protected portal area, where students and instructor could meet and "chat" through a text discussion board, or ultimately through a third party application, that allows synchronous audio and/or video. This approach allowed schedulers to redesign course schedules efficiently, students more flexibility on how they approached learning and faculty a method, and space and opportunity to integrate authentic contexts for teaching and learning (Garrison, & Kanuka, 2004).

Fortunately, the discussion included potential benefits for student learning; specifically, how students process information (Stacey & Gerbic, 2009). This approach capitalizes on the power of informal settings, as part of the formal learning environment (via technology), as well as extended beyond by meeting students during the regularly scheduled times. The ability to consider a redistribution of space and time for learning provided another layer of consideration for faculty whose learning outcomes aligned more closely with the skills that students would be expected to perform when entering a career (Mortera-Gutiérrez, 2006). The weekly face-to-face (F2F) meeting provided an opportunity to share information, clarify misconceptions and build foundational relationships, which became essential as the academic experience became more asynchronous and online. Misinterpretation of emails and other

non-verbal communication was minimized and/or clarified during the weekly F2F interaction (Bonk & Graham, 2006).

Assessment

Whenever there is a shift in instructional approach, typically there is also an associated shift in how we assess both the instruction and the student outcomes (Singh, 2003). Unfortunately, there still remains a reaction from many that when using technology, an entirely different paradigm for instruction is needed. In addition, there is an immediate assumption that the change in instructional format or environment will be of lower quality and requires additional structure and/or oversight. Ironically, the quality of instruction inside the traditional F2F higher education classroom over the past century has little if any real assessment of learning, or what is happening inside the classroom (Schulman & Sims, 1999). We make an assumption that as long as students are graduating, securing gainful employment and there are no significant disruptions or extremely low evaluations (many universities are now calling these “student perceptions”) by students of teachers, all is well. However, with the rapid progress of instruction being offered in an online (blended/hybrid) environment, administrators and accrediting bodies began to investigate the quality of instruction with additional policies and regulations (Katz, 2008). Most of the new policies were directed to a traditional model of “seat time”, or “credit hours”, factors, which systems were currently in place to be able to measure what was easily measurable and understandable.

The pursuit of assessing actual learning, especially in the higher level Blooms category of application, analysis and synthesis, were typically not addressed (Gaytan & McEwen, 2007). Faculty began to move some of their material into a hybrid/blended format, which may have included their standard syllabus, perhaps assignments and research papers required. Some faculty began to explore recording their lectures on video and making those available and even others attempted screen capturing applications to create audio files of their lectures as they presented PowerPoints. It was not until recently that we made creating dynamic electronic learning objects (eLOs) easier to create, embed and assess (Howard, Remenyi, & Pap, 2006). However, creating eLOs are still a challenge as they do require significant amount of time to develop and many institutions have not found a financial model, which supports faculty who are ready to translate their instructional design.

Instructional design

Ruben Puentedura (2012) established a model of instructional design movement when integrating technology called the SAMR model. The SAMR model describes the stages that an institution might experience on the path to redefining how it approaches hybrid/blended learning. The four steps of SAMR include:

- Substitution: Technology acts as a direct tool substitute, with no functional change.
- Augmentation: Technology acts as a direct tool substitute, with functional improvement.
- Modification: Technology allows for significant task redesign.
- Redefinition: Technology allows for the creation of new tasks, previously inconceivable.

The steps of the model are without judgment and focus on intentionality. Moving material from traditional into an electronic format addresses the Substitution stage. We can clearly see how many institutions and faculty had Substituted their traditional courses into hybrid/blended courses by posting a traditional syllabus into the university LMS. This step can be viewed as highly productive, when faculty are intentional about their rationale and how they plan to proceed and create enhanced

teaching and learning artifacts, which attend to both the type of hybrid/blended learning and the new learning environment. Faculty can move their syllabus to an Augmentation stage by integrating hyperlinks to the syllabus, allowing learners to access additional, just-in-time resources. This approach provides a functional improvement as the function of the syllabus becomes more than a static document. Moving instruction to the Modification and Redefinition stages require creating dynamic electronic learning objects and redesigning learning outcomes.

The SAMR model has been particularly useful in facilitating transition from face-to-face courses into a blended and/or hybrid learning environment, especially in the arena of mobile learning. Hargis, Cavanaugh, Kamali, & Soto (2014) found that informal learning opportunities increased; learners connected concepts more quickly; individualized learning for differentiated learning occurred more often; and student perceptions of education was transformed. The ability for faculty to create a plan for transitioning their courses into a hybrid/blended learning environment empowered faculty and provided a roadmap to both instructor and student. The ability to be intentional about how we translate courses into a blended/hybrid environment is critical to ensuring a similar or perhaps even better learning experience (Cavanaugh, Hargis, Kamali, & Soto, 2013). In addition, the SAMR approach facilitated clearer faculty development opportunities, and methods to identify what type of development was needed and at what intervals (Hargis, 2014).

Development and implementation (SAMR)

The process of developing and implementing a hybrid model at Chaminade University was organic, and grew out of the instructor's live classroom teaching practices. Substitution: the instructor initially used Chaminade's online platform (eCollege) to distribute class material or as a repository for class handouts; threaded discussions were also used as homework responses to guided questions on class texts. Augmentation: Over time, the online platform grew in usefulness and importance in the delivery of class material, to the point at which classes began to be structured through weekly modules and online assignments that were given as homework. In summer of 2012, the instructor moved away from Oahu and Chaminade's main campus back to Maui, with the intent of accepting the college's initiative in developing hybrid/blended classes. This move required that the online platform took a much more central role in facilitating a three-session per week class; the instructor would meet with class twice a week (Monday-Wednesday) and then construct an online class for the Friday session. Modification: As a result, existing class exercises were transposed from live class activities to online material. For example, informal or formal quizzes on class readings were now delivered online, and students were expected to complete the quizzes and submit them in their eCollege dropbox by a specific time. This meant that students were receiving the same material, but now under more independently structured conditions. Redefinition: Using eCollege's tools, it became possible to construct timed lesson plans that were only available to students on Fridays, as a substitute for the Friday class period. These modules are constantly being developed, and can incorporate videos, audio files, lecture notes, and timed exercises. These practices are being developed each semester and tested for their efficacy, in part through student assessment and student evaluations (see below).

Methods

The participants for this study were 93 students, 64 female, between the ages of 18-27 with distinctly mixed cultural identity differences. Data was collected during the fall semester, 2014. The analyses are conducted on data collected from the all 93 participants. All information was numerically coded by the participant's last four digits of their student-ID number, and confidentiality was maintained to the

extent stated and required. The following data was collated and analyzed from two sections of English 102 (22 and 22 students respectively), and two sections of English 201 (25 and 24 students respectively). The student learning outcomes (SLOs) for each class will be listed, followed by the data, and finally by our conclusions.

Student Learning Outcomes for English 102

In order to successfully complete this course, a student must demonstrate the following competencies:

Writing Skills

1. To demonstrate the correct use of grammar, punctuation, word choice, mechanics, and sentence structure in a written text.
2. To demonstrate the ability to edit a text with grammar, punctuation, word choice, mechanics, and sentence structure errors.
3. To demonstrate paragraph and essay development in a written text.
 - To demonstrate thesis statements.
 - To demonstrate topic sentences.
 - To demonstrate clear supporting examples for thesis sentence and topic sentences.
 - To demonstrate logical and clear connections between topic/thesis sentences and supporting examples.
4. To demonstrate an organized paper.
 - To demonstrate an effective introductory paragraph.
 - To demonstrate an effective concluding paragraph.
 - To demonstrate the use of transitions (internal/within a paragraph and external/ between paragraphs) in a written text.
5. To demonstrate pre-writing strategies and techniques such as mapping, free writing, and listing.
6. To identify and apply rhetorical writing techniques (narrative, descriptive, expository/illustration, comparison and contrast, cause and effect, definition, persuasion, classification, division).
 - To demonstrate logical structure utilizing the rhetorical techniques.
7. To demonstrate the ability to research, draft, revise and edit a research paper.
8. To demonstrate the correct use of MLA documentation.
 - To demonstrate an understanding of the difference between a bibliography and a works cited page.
 - To demonstrate an understanding of plagiarism.
 - To demonstrate the ability to cite sources within the body of a text.

Critical Thinking Skills

9. To demonstrate the ability to evaluate and synthesize research information.
 - To demonstrate the ability to evaluate the validity of source information.
 - To demonstrate the ability to distinguish between reason and belief.
10. To demonstrate the ability to apply and integrate material from sources.
11. To be able to critically reflect on the writing process.

Student Learning Outcomes for English 201

1. Able to demonstrate familiarity with the elements of poetry, drama, and fiction, and the literary terms used to discuss them.
2. Able to demonstrate ability to read and analyze literary works using the elements of poetry, drama, and fiction, and to recognize the skills used to synthesize information and write literary essays.
3. Able to demonstrate an understanding of at least two ways to interpret literary texts.
4. Able to demonstrate the ability to write unified, coherent, well-developed essays about literary works.

Procedure

The LMS allows for helpful delivery of material online and in-class. For the Friday period, an assignment was constructed each week that students were expected to complete. A typical week for English 201: Types of Literature looks like the following:

Monday: Discuss and deconstruct Act 1 of *Richard III* Homework: Read acts II and III, and respond to guided question in threaded discussion (Ecollege)

Wednesday: Discuss comments, thoughts, opinions on the reading, deliver short lecture and context on the acts, watch clips that help students visualize and conceptualize the action and language. Homework: Finish play and respond go guided question in threaded discussion (LMS)

Friday online: Read assigned critical or historical article related to Shakespeare and/or *Richard III*, and respond to guided question in discussion thread; n.b. this article and thread are ONLY open on Fridays, using Ecollege tools, and students cannot access the response tab after the Friday has expired. Credit will be given on timely and full completion of response. (30 minutes)

Monday: Use the threaded discussion as a springboard for discussion of the text and of the article assigned for Friday.

The student responses to the Friday homework assignments are posted in the digital “Dropbox” of eCollege, where the instructor can quickly see if the homework has been completed on time and access it conveniently. Student responses also produce questions and talking points that can be addressed directly in person in the following Monday’s class.

The Friday homework assignment helps teach students self-discipline, and places more responsibility for learning on their shoulders, while the instructor is required to manage, monitor, troubleshoot and respond to the student posts. If anything, the online aspect of the hybrid classes can be more time-consuming than a normal live class.

Data Collection Instrument

As part of the assessment of the class, the instructor asked students to complete the following assessment tool anonymously. The data was then collated; typical responses are presented below.

This hybrid class has been part of a pilot project to explore different ways of teaching at this university. Please respond to the questions below regarding the class. Copy and paste them into a document and drop them

into the dropbox as usual. I will cut and paste your answers into a fresh document so that your responses will be completely anonymous. They will be used to create a report on the viability of hybrid classes for students

Hybrid English Course 102-02-01 Fall 2014

1. From 1 to 10 (10 being the most positive), how helpful have you found the hybrid format for this class compared to the traditional full Monday-Wednesday-Friday classroom format?
2. If yes, how have you found this helpful? If no, what needed to be improved or considered to help you?
3. Do you feel like you learned more/as much/less than you would have done in a full three-day schedule?
4. Did the online section of the class compliment the live classroom experience for you? Was there continuity between the ecollege exercises and the live class?
5. Would you recommend the hybrid-format class to other students?

Results and Data Analysis

The data analysis included data management, initial analysis, and higher-level analysis. In order to ensure proper management of the data collected for this study, all data were organized by questions into a spreadsheet and used Computer Assisted Qualitative Data Analysis Software (CAQDAS) HyperRESEARCH to provide coding. Finally, the codings were analyzed to develop themes.

Each question consisted of data from English 102 and English 201. For each question, codings were applied in two cycles. During the first coding cycle, initial coding method was used, and in the second coding cycle focused coding method was used to further develop “the most salient categories” in the data (Saldaña, 2009, p. 155).

The shift from initial impressionistic to more in-depth analysis of the data required preliminary examination of the existing data. First, evaluating which data to include and how much data to include were examined. Second, the condition of the data was evaluated for accuracy, consistency, and formatting in order to prepare for CAQDAS. Then using HyperRESEARCH, initial codes were created. After several iterations of the first coding cycle, many codes were consolidated, deleted, and revised. In the second cycle, some of the revised codes were categorized into four categories. Detailed descriptions of the codes and categories can be found in table 1.

Table 1: Categories, Codes and Brief Descriptions

<i>Categories</i>	<i>Codes</i>	<i>Descriptions</i>
Affective	Fun	Student’s perception of hybrid course being fun.
	Recommend	Student’s strong recommendation for the hybrid course.
	Value	Student’s emotional value placed on the hybrid course.
Effective	Knowledge	Student’s content knowledge gained through the hybrid course.
	Skill	Student’s skill gained through the hybrid course.
	Learning	Student’s enhanced learning through the hybrid course.
Efficient	Time	Student’s perception of hybrid course related to time.
	Convenience	Student’s perception of hybrid course related to convenience.
Engage	Peers	Student’s perception of hybrid course related to peers.
	Content	Student’s perception of hybrid course related to content.
	Professor	Student’s perception of hybrid course related to professor.

The coding analysis revealed four categories: Affective, Effective, Efficient, and Engage. Affective category consisted of comments such as “The online classes were fun” or “a fun, interactive way to have an English class” or “I would recommend this hybrid-format class to other students because I personally loved it.”. This category showed the students’ emotions or values associated with the hybrid format of the course.

Effective category included any comments that included gaining content knowledge or skills that enhanced learning. Such comments were “I have learned more in this class despite not having live class on every scheduled day versus some of the other classes that I have taken and had to be present everyday”, or “...the online section of the class did compliment the live classroom because it allowed all the individual students to share their own opinions and comments on the discussion at hand. And if there were any lingering questions, it would be cleared up at the next class date because we regularly review the online postings at a deeper level”.

The largest comments were in the Efficient category. This category included comments mainly dealing with time and convenience. Students commented, for example, that “The hybrid aspect of this class worked really well with my busy schedule”, or “It really works well with students who have a busy life schedule like myself.”

Engage category included comments that made connection to contents, peers, or the professor. Some comments in this category included “On our class discussion board, we were able to read through what our classmates’ opinions were instead of sitting in class with only the same people participating in discussions every day”, or “I felt like it was a good way to engage in activities each week regarding the reading material”, or “I also liked that we watched videos and clips of the readings. This helped with understanding what was going on. It helped a lot too when Professor would explain things in class”.

One of the comments really summarized the overall theme: “Hybrid format kind of provides the best of both worlds because you have direct interaction with a professor while still having the freedom of not always being in a structured classroom.”

Student response to the hybrid format has been overwhelmingly, almost unanimously, positive and constructive. The concern was that students would consider the Friday a “day-off,” and the instructor constructed the Friday assignments in such a way that this was not a possibility. Students found the assignments relevant to the live classes, challenging enough to encourage critical thinking about the given subject, and not so onerous that they would get frustrated.

For question (1), no student in any class responded lower than a 7. For question (3), no student responded that they learned “less” than they would have done in a full live class. For question (5), every student in every class responded that they would recommend hybrid courses to their friends and other students. Students found the hybrid format to be helpful not only to their learning experience in these English classes, but also in other classes, as they had time freed up to structure for other activities, such as laboratory sessions, work, parenting, and extracurricular college activities. Most importantly, no student felt that learning was lost or compromised in their English classes.

The notable themes that emerged from these categories are 1) the hybrid format evoked emotional connection for some students; 2) the hybrid format provided effective ways to gain content knowledge

and skills to enhance learning; 3) the hybrid format provided efficient ways learn by saving time and providing convenience; 4) the hybrid format provided engagement among peers, with professor, and with the class content.

Discussion

Pedagogical Advantages

The hybrid format encourages students to learn and take more responsibility for their own learning outcomes, because they are required to find, complete, and submit the Friday work by themselves. It was made clear in the very first class of semester, and through the syllabus, that the Friday homework was a required part of the course, and was considered as class attendance.

The Friday component can be used by the instructor to deliver important materials, to continue class themes and discussions (online), and to encourage critical thinking for assignments that are to be addressed in the following Monday's class. It is important that Friday material be related to in-class work or assignments, as students need to understand and identify the relevance of the work they are doing in their own time. This helps students to meet the student learning outcomes.

The online aspect of the class also frees up the instructor to vary methods of delivery of class material in innovative ways. For example, quizzes can be administered and collected; video clips and guided responses can be given; or students can be encouraged to research and submit findings to guided questions. The availability of the Friday component can be controlled by the instructor, so that, should the instructor choose, it can be open for the usual class-time, or for the whole day.

The LMS also provides helpful evidence of student participation and completion, which helps register whether students are fully participatory in class. Most, if not all, LMS have tools that allow instructors to monitor student activity and participation to different degrees, making the blended teaching method helpful to the instructor in terms of gathering data on whole classes or individual students. This can be particularly helpful with problematic students who are not engaging in class or who need motivation: the instructor can point to the statistical data provided by the LMS either as motivation for that student, or, if needed, as defense of a grade that might be disputed by the student.

Institutional advantages

There are several immediately obvious institutional advantages to hybrid classes within the university catalogue. The format demonstrates a flexibility of teaching and learning formats to students, potential faculty, current faculty, and our accrediting body. Hybrid classes demonstrate a willingness to engage with current and experimental pedagogical practices while maintaining its commitment to student-instructor relationships.

The hybrid format also frees up class space for other faculty or students on the Friday session. Classroom space is a challenge with a small campus, and the hybrid learning format allows for at least one day of free classroom space (in this instance the Friday sessions). For example, the classroom is often booked for faculty and student club meetings on these Fridays.

The hybrid format, especially in the MWF class segments, stays loyal to the university's commitment to small, regular, face-to-face classroom experiences for its students. Even without one of the live class sessions, the instructor still meets the students twice a week, as they would with the Tuesday-Thursday

class segments, thereby maintaining the frequency of face-to-face classes and being augmented by the Friday online class material.

The hybrid format also places the university at the forefront of pedagogical experimentation and practices, by mixing online platforms in conjunction with student-instructor interaction. The South Pacific topography makes it difficult for some of our students to make class regularly or consistently. The hybrid format provides students with such difficulties better opportunities of engaging with and completing classes. Since teaching the hybrid format classes, there have been very high levels of student completion and retention. The inclusion of hybrid classes in the catalogue helps to make the university potentially more attractive to non-traditional students, especially older, working students and parents. The hybrid classes also work well for cohort students with formidable specialized class loads, such as nursing and criminal justice students. These students tend to be highly motivated, organized, and grateful for the flexibility of the hybrid format, given their traditional workload from their primary classes, as demonstrated in many of the comments provided above.

The hybrid approach is particularly relevant to campuses that present students and faculty with difficulties of access. In addition, many of our students work part-time, and hybrid classes are well suited to helping them balance work and college. Hybrid teaching and learning - the appropriate blending of live and online teaching - can benefit college campuses that face similar challenges.

The hybrid approach coupled with the SAMR model provides an institutional model to support specific and individualized faculty development. Our university, as well as many other universities are increasing the number of hybrid/blended courses offered and integrating the SAMR model provides a model and metric for development and quality assurance. Models are common in the academy and often preferred over 'template-driven' mandates. Institutions can create and support a SAMR approach to holistic movements in the transition and monitoring of blended/hybrid learning to ensure a quality learning experience for students, as well as assure accreditors of adequate and appropriate oversight.

Faculty Advantages

The immediate faculty advantage is flexibility of course delivery, of time, and therefore of their availability for other campus responsibilities, including, but not limited to, committee work and scholarship. They also help faculty who face logistical challenges, such as living far from campus, or faculty with children or family responsibilities. This faculty member, for example, has two young children (4 and 2), and lives on a neighboring island. The faculty member flies to the campus on Mondays and Wednesdays to undertake the live classroom sessions, and maintains the online portions of each class from home. He found he worked very hard on the Friday class sessions, but that work could be done in his own time, in the evenings or over the weekends, depending on what needed to be done. This flexibility, he discovered, helped him focus on other work, particularly scholarship.

The hybrid classes also force faculty to consider best pedagogical practices. The hybrid format can provide faculty, and administration, with valuable evidence of student and instructor engagement in the class, particularly through the LMS tools. The online portion of the class should complement the live classroom experience, and can help in many different ways. Different disciplines can use the online platforms to their own advantages, whether testing, online chatting, experimenting, or writing and grading papers.

The SAMR model empowers faculty to set and monitor their own movement of progress along the SAMR schedule. Although Redefinition is not the ultimate goal, faculty can reflect and set their own goals for transformation, in addition to working with university Centers for Teaching and Learning to assist in specific ways of movement along the SAMR roadmap. Maintaining an intentional plan, while attending to the appropriate, relevant and meaningful use of instructional technology will be essential for further faculty engagement in creating hybrid/blended courses.

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