Using Archives to Analyze Online Curricular Structures at a Community College

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Introduction

Using qualitative inductive analytical approaches, this paper examined the curricular structures of twenty-two (22) online courses (both fully online and hybrid) randomly chosen from Shoreline Community College's (SCC) course archives to explore how structural elements enhance online learner interactivity and experiences.

The Curricular Structures and Student Interactivity Online Course Evaluation Instrument was used to evaluate structure, curricular content, planned and unplanned student interactivity, and observable instructional strategies.

This audit examined how courses' courseware and curricular structure apparently affect student interactivity, identified as an important aspect of acquiring implicit and explicit knowledge (Brown and Duguid, 1996, cited in Hung, 2001, p. 33). The tool used was created based on extant research on high-interactivity instructor-led online courses, curriculum development, and instructional design. The pedagogical structure was assumed to have been purposefully created, whether with a formal or explicit theory of learning or a lay or implicit theory (Barab, 2004, p. 16). Conducting audits of archived courses identified strategies for online curriculum development and pedagogical improvements.

Archived Course Analysis Findings

Twenty-two courses were randomly selected from the archived course database of Shoreline Community College. Eleven male teachers and nine female teachers gave written permissions for their 22 courses to be used, with one male and one female teacher contributing two courses each. The majority of the instructors were full-time tenured (12), two were retired but teaching part-time (2), and three were adjunct instructors (3). One class was co-taught by two instructors. These 8 - 11-week quarter-long courses were both from the college transfer and professional technical course offerings. (The 8-week courses were summer ones while the 11-week ones were regular academic year quarters). The subject matters were wide-ranging. Some, like geology, philosophy, English, history, Women's Studies, geology, and political science fulfilled the "distribution" requirements for transfer degrees for university studies. Others, accounting, computer information systems, criminal justice, business, nursing, healthcare, speech language pathology, automotive mechanics, and medical lab technology courses, fulfill requirements for particular professional-technical programs. Course sizes ranged from about 11 students to 58 in a double section. These courses ranged in credit from 3 to 5 credits, and all were freshman and sophomore-level courses.

The oldest course was taught in 2002, and the most recent one was in Summer 2004. All courses were the original creations of the on-campus faculty, with no boxed or pre-packaged courses. The grading methods for the courses were all GPA-based on a 4.0 scale. None used boxed curricular add-ons. Three of the 22 courses lacked the Discussion Board student commentary in the re-uploaded forms, so the student responses there could not be directly used for the research. These Blackboard™ -mediated courses offer a shared space for the building of shared learning. Except for individual assignments and tests, which were delivered to instructors through the Digital Dropbox, email, fax, or snail mail, all other discussion points were posted in public space for public consumption. The research focused on four areas: structure, curricular content, planned and unplanned student

interactivity, and observable instructional strategies.

1. Courseware and Curricular Structure

The structure aspect of an online course referred to the courseware and tools that helped present and deliver the learning. It also involved the supporting materials for the course, from the textbook to videos to other elements, as these formed some of the parameters of the course. Course policies (both institutional and instructor/course-based ones) also formed a structure by setting expectations and parameters for learner behaviors and actions within the course. Twenty of the courses analyzed were fully online courses, and two were hybrid, meaning that they involved some face-to-face meeting times.

Six of the 22 courses had buttons for aspects of the course that were not used, whether that entailed the Virtual Classroom for synchronous studies or the Groups link that did not lead to any assigned groups or a Staff link that did not involve any instructor biography. Such unfulfilled links may have led to confusion by learners about what parts of the classroom are used. The most common courseware tools used were for the delivery of electronic content to learners: the Announcements section, Course Info, Faculty Info, Course Documents, Assignments, and Textbooks. Communications and Discussion Board links were used for planned interactivity, although these were used with varying degrees of success.

In ideal circumstances, the Bb site became a "microverse" of learning, as exemplified by a criminal justice course that brought students into the world of law enforcement with its ethical grayness, real-world complexity, and rawness. Case studies brought issues to life, and the URLs to various resources embedded students in a world of law enforcement. Elder (1973) makes the point that simulations work most effectively as a part of a multi-faceted and mutually supporting educational strategy. Discussions with the instructor and peers imbued the virtual space with the lifeblood of the studies.

While there were queries from students about where to find particular quizzes, assignments, lectures, or downloadable resources, most seemed quite attuned to navigating the courseware structure. Several students posted messages of frustration in using the online site, but there were a number of postings about the efficiency of the site and the ease of taking online tests at home in a relatively stress-free environment. An apparent challenge for those using America Online while taking an exam seemed to affect several students, who apparently got timed out while taking a quiz.

All of the courses analyzed required textbooks. Many of the courses were built around the logical (topical, chronological, or other) structures of the texts. Supporting materials for the courses involved software (MS Excel, MS Word, and general ledger software), CD-ROMS, four-function calculators, and even a rock sample kit. Several courses involved labs and lab equipment.

Avoidance of passive learning. Given how much online learning appeared to be a text-based medium, some researchers expressed concern that students often scan their textbooks "with the same degree of passivity they brought to watching television programs, movies, videotapes or any of the other passive forms of communication which permeate their world" (Newton and Thomas, 1986, p. 182). Others fear an uncritical acceptance of all information given (Noonan, 1998, pp. 205 - 219). To address such concerns, a number of online instructors connect the learning content to applied world issues through in-depth discussions using the Discussion Board and external online links.

Learners bring their personal backgrounds and internal representations to bear on new learning, under a constructivist model. "In learning activities, knowledge is based on individual constructions that are not tied to any external reality, but rather to the learner's interaction with an external world" (Lacy and Wood, 1993). While processing and integrating instructional content in schools, much content quickly becomes 'inert,' as it has little relevance to the life circumstances of the learners (Gagné, Yekovich, and Yekovich, 1993, cited in Liaw and Huang, 2000, pp. 41 - 45). Authentic learning would require applied use to learners' various situations.

Instructors have long concerned themselves with the interactive richness of online learning and the need for face-to-face

complexity (Anson, 1999). There have been fears of computer-mediated social isolationism of learners, which deny close working relationships between students and faculty and social adeptness, according to Stoll in *Silicon Snake Oil: Second Thoughts on the Information Highway* (qtd. in Anson, 1999, p. 269). Students may remain passive as depositories of knowledge. Large lecture courses—"driven by the transmission and retrieval of information"—may also result in more learner passivity (Anson, 1999, p. 270).

Faculty strove to draw learners out of passivity by requiring an active engagement with the world. Simulations, digital models of processes, were used in online classes to mimic real-world actions. These were used quite often in science courses. A kind of simulation might exist in the form of scenarios, in which learners go through role playing a situation. Also, case studies often emulated some of the greater strengths of simulations. In a medical laboratory technology course, a "sick house syndrome" case study put students into the role of biological detective. Learners were given details of a mold that has appeared in a home, and their job was to diagnose the problem. This coalesced the elements of book learning, digital slide images, and students' critical thinking skills. In a mycology case study, the instructor offered students a digital glimpse at Petri dish cultures, and they needed to apply their learning to decipher the mystery of a particular culture. She built the learning through ever-more complex case studies, from which students had to identify causative biological agents. Learners were encouraged to enlarge a graphic image to look at the specific details of a particular biological agent.

In a criminal justice course, real-world cases were used to highlight issues in the criminal justice system. The instructor was fostering a sense of critical thinking through student research of the issues online and their debate by taking different stands. The students were never attacked for a stand they took. This was clearly an intellectual exercise as well as one with social implications. A point-of-view exercise offered a 360-degree view of the criminal justice system by examining how a judge, defense attorney, prosecuting attorney, jury members, defendant, and victim might see a case and what would be seen as a "successful" case for each. This could create not only a larger macro sense of the judicial system but a level of empathy.

Case-based teaching. The use of case studies to provoke critical thought and discussion in online classes has been established in a range of fields. A case study is a descriptive research document that is often presented in narrative form (Merseth, 1994 cited in McLellan, 2004, p. 14). Case studies enhance knowledge transfer in three main ways, according to Merseth. "This includes (1) cases as exemplars; (2) cases as opportunities to practice analysis, the assimilation of differing perspectives, and contemplation of action; and (3) cases as stimulants to personal reflection. Case studies provide opportunities to practice decision-making and problem-solving" (McLellan, 2004, p. 15). Case studies must be intentionally designed, and may include large- and small-group discussions, role-playing, written analysis, and team-based discussions (McLellan, 2004, p. 15).

Instructors used a variety of downloadable files for their learners. These included MS Word files, .txt ASCII-text files, and PowerPoint slideshows. There was concern shown for learners who might not have access to various programs to open the files, and several instructors made mitigations for learners who could not open a particular file. One translated a PowerPoint into an MS Word text file. One accounting instructor had different sets of assignments based on whether learners had access to a particular textbook and software system. As for downloadable files from "External Links" sites, a number of graphics, audio, video, Flash movies, portable document files (.pdfs) and other types of files were available, with virtually no questions or support asked of the instructors regarding those files. No instructor seemed to use interactive television (ITV) or video recordings.

Instructors' posted bios seemed to have several purposes:

(1) To humanize themselves to learners by sharing information about their interests, family situations, pets, business work lives, and occasionally including head-shot photos of themselves;

(2) To enhance their professional credibility by sharing information about their higher education, teaching experiences, publications, work histories, travels, and expertise.

A majority of the student biographiess used the first person point-of-view. Many had typos and misspellings in their writing, possibly in part because of efficiency needs and to create a colloquial sensibility. (One faculty posted a humorous message asking for learners to be more formal: "On your Discussion Board posts, I know it feels very much like a casual situation, but I want to emphasize that when you post a thread or a reply you should use correct spelling and grammar. please use capital leters with korect spellng 'cuz i fine it difculyt to unnderstand ur messj wen u tak shortcuts just think whut it wud be lik if i uzed thesame tekneks in the stuf i post u mite hav truble two as i said b4 i cn unnerstan a =) but please use them ;>) wisely (:0 cuz sumtines its tuf fer moi.")

Three instructors posted smiling headshots of themselves in their self-intros. One posted a picture of his pet dog. Another instructor strove to connect with his learners and establish his credibility. He mentioned professionals in the field of law enforcement, creating a sense of a "small world." His connections in the various police departments, law firms, and courts enhanced his standing in the classroom. These connections also supported his learners in getting contacts for internships. A surprising number of instructors shared family stories, health issues, and personal struggles with learners, in genuine efforts to come across as human.

Several instructors made it a point to highlight their mistakes and to connect. One failed to post a quiz on time. Another had not uploaded a necessary lecture to the server. Another lost the discussion threads she had wanted to post. One had miscalculated a set of grades and had to redo those. Two instructors solicited student critique for improvements to the class in the future. As with many other forums, there was no last word, but valid questions and competing ideas.

*The need for a shared human encounter***.** Researchers have observed the need for a sense of human connectivity in online encounters, particularly in asynchronous communications situations. Aynchronization may lead to a sense of "temporal asymmetry" which may be disconcerting for learners (Elder, 1973).

Synchronous interactions may support a stronger sense of shared context and human connection, which enables easier communications. "Singh (1999) has observed that 'Under synchronous communication, the parties involved share more of their context and can thus make stronger assumptions about each other'" (cited in Shotsberger, 2000, p. 56). The structural study of interaction has surfaced four variables: multiplex messages, message duration, information content, and lag time of response. Para-language emoticons add another layer of communications (Yacci, 2000)

Feedback may reinforce ideas, provide information, and confirm assertions. However, redundancy of information—which appears in a number of courses—was considered "without value" because it contains no new intelligence" (Pierce, 1961, cited in Yacci, 2000, p. 5).

Shotsberger (1997, 2000) observed the need for collegial and nurturing interactions. Learners provided each other with support such as tips on where to buy course supplies; ideas on course assignments; friendly forms of address ("Hello, Love" to a student who has lost her mother recently to leukemia), and shared learning goals—even when students disagree diametrically, particularly on political issues. Such communications required a high level of interpersonal skills.

A number of online instructors set clear guidelines for "netiquette" in online discussions. Several addressed the low-affect quality of online postings. These approaches meshed well with research findings for the need to state learning goals of the online dialogues clearly(Watson, et al., 2004). Watson and colleagues called for a "framework of explicitly stated assumptions and clear definitions would be called for" (p. 57). Indeed, the need for high mutual coherence or the absence of "noise" were crucial to head off feelings of disconnectedness and alienation (Yacci, 2000). Others called this phenomena "mutual harmony" and saw this as a push for lowering anxiety

(Giddens, 1984, as cited by Hackman, 2002, p. 109). Dialogue (Banathy, 2003) is a "disciplined, consensus-building process of collective communication based on shared values and beliefs'" (p. 11, as cited in Watson, et al., 2004, p. 54).

Learners needed to perceive a full closed loop in the conversation, or there would be a feeling of dissatisfaction (Yacci, 2000). A message could be perceived as hanging. Yet, in a majority of the online courses, there were examples of student learners who posted queries, observations and ideas—without any clear response from either the instructor or the peer. Many of these loose threads seemed to have disappeared into the online ether. Still, growing sophistication in the use of information technologies was seen to promote individuals' communications abilities and a lessening sense of isolation behind the computer screens (Hazzan, 1999, p. 55).

These online instructors made a conscientious effort to highlight face-to-face meetings, fieldwork, off-campus fieldtrips, lab sessions, and other non-online course structures. One health course solicited 6-8 student volunteers to go to campus to set up fungal cultures for visiting high school students. A Women's Studies class included mention of students attending a "Sex Toy Workshop" on campus. Several classes required on-campus labs, and these included online forums to discuss "lab results, questions, (and) ideas." Students were sent to the media center in the library for resources (books, films, and other resources). They were invited to on-campus events, career fairs, poetry readings, live jazz performances around town, and other venues. Professional-technical students were sent to their own lab on campus for support. One instructor made reference to another professor on campus with whom he differed about fundamental philosophical issues. That casual comment helped bridge some of the virtuality of the online class. Two faculty members mentioned courses being offered the next quarter to recruit enrollees.

In terms of policy scaffolding, a number of instructors detailed their expectations. Many were mentioned right from the beginning, and additional ones were brought up as issues arose. Faculty referred to on-campus policies. Policies on Student Conduct and Discipline, grading, plagiarism, withdrawal, inclement weather, and care of students with disabilities were mentioned by over half of the faculty in this sample. Several included the school's billing policy regarding tuition.

Conventional instructor policy issues related to late policies, netiquette for course discussions, proper behaviors in skills labs, grading, and test makeup policies. One faculty member held learners responsible for rules even if they had not read them. Several included a disclaimer suggesting that the syllabi could be changed at any time depending on the learning needs of the course. Another instructor reserved the right to schedule and assign additional assessments to individual students as needed. A writing instructor focused on the standard issues of consideration in terms of research sources: "author/authority, sponsor, purpose of resource, audience, bias/ objectivity, accuracy/ credibility, and currency." Student punctuality was the focus of yet another instructor's policy: "PLEASE NOTE: WE WILL SUPPLY FUTURE EMPLOYERS WITH YOUR ATTENDANCE AND PUNCTUALITY RECORD IF THEY REQUEST IT." Students' research papers' topic proposals could not be changed in midstream. Students could not copy and paste text during an exam.

Revised student comments should not be posted for higher grades because the instructor will not consider that work for more points, one person posted. Contrary to this practice, one theorist suggested that learners should be given multiple feedback tries instead of single-try feedback (STF). (Hemphill, 2000, p. 54). A number of courses did not offer the preliminary drafting of essays and then revisions for more high-value grades. Test retries were clearly out of the question. That said, there were some offerings of practice exams that were ungraded, which might qualify as multiple-try feedback (MTF) loops.

One instructor promoted a flexible approach to learning by inviting students to post emails outside of the classroom if mitigating issues arose that might hinder the students' work. This instructor "patience" was a critical element in the theory of learning through "serious play." To achieve this mental state that promotes learning, administrators and teachers were urged to soften

deadlines and lighten pressured expectations. "A student who wants to explore a domain via serious play may be pressured to 'move on' by school administrators, teachers, and parents. Serious play was most compatible with long-term goals, such as the development of a deep understanding and true love of a content area or topic" (Rieber and Matzko, 2001, p. 16).

Surprisingly, none of the courses mentioned copyright issues. There were at least eight articles that were cut and pasted out of copyrighted newspapers and journals into the various online classrooms, seven by students and one by a faculty member. Two faculty members linked to articles that required the readers to have an account with the respective publishers. For one, access would be free with registration. For the other, a micro-payment would have to be made to access the archived article. A more complete policy stance would address issues of copyright and fair use of electronic information.

Other technologies outside of the courseware involved the use of emails and digital scanners. No Webcams, faxes, e-books, or personal digital assistants (PDAs) or other types of technologies were mentioned. In terms of technology concerns beyond those linked to the courseware, learners expressed frustration with links that would not open, inaccessible quizzes, browser challenges for one trying to access the course site from France, and bounced-back emails. One message expressed severe frustration regarding multiple answer exams and blamed computers and "their tiny-minded, algorithmic, 'every-single-dot must match every-single-dot' grading engine." Backup plans in case of technological failure should also be put into place (Maddux, et al., 1999, pp. 43 - 47). For all the concerns about the technology, only one of the 22 courses seemed to have any backup plan in case of server outage or other technological failures. The mitigation seemed to be the allowance of extended deadlines and not any fallback plan to email.

Graphics were underused. Only two of the courses used graphical images or telephones in any curricular way. In one, graphical images mimicked slides of microbial cultures. In another, it was a decorative element in a biology course, but it did not apparently closely relate to the learning. Some informational graphics like tables and charts were used. Occasionally, clip art was employed to eliminate the visual tedium of plenty of text, but not often. "The language of visual instructions remains very primitive, with a limited number of signs and a weakly developed grammar. Visual instructions are still a small sub-category of visual information" (Mijksenaar and Westendorp, 1999, p. 5). That said, student files and works often did include digital photos.

Curricular ordering and presentation seemed to generally follow the chapter order of the course textbooks. Concept "laddering" (building ideas developmentally) was offered in one class. Others used topical approaches by grouping information based on relatedness by focusing on seminal concepts earlier and more complex ones later on. The chronological presentation of information may also offer an internally logical presentation method. Course goals were explicitly mentioned for only one of the courses in terms of direct use of Master Course Outline (MCO) information. Other course goals were mentioned more casually and often as a part of the syllabus. Some courses used chronology, such as history and political science courses. Overall, in regards to these online course structures, most were highly directive. Deadlines played a critical role in focusing learner attention, and there was no structural self-pacing or open-entry or open-exit. Instructors built in much redundancy regarding deadlines—through the use of graphical calendars, announcements heralding deadlines, emails with deadline reminders, and Discussion Board forums listing deadlines.

Student growth. The changes in student roles were particularly apparent in a cohort-based automotive program where learners shared about their real-world automotive shop professional experiences and clearly were growing into their expertise by being given greater responsibilities at their respective shops. Structural supports for learners involved forums for discussion of their questions, some office hours for distance learning instructors, peer support, and access to campus resources like labs, for those who had the inclination to visit the

campus. Some instructors added extra credit opportunities to support learners. Others graded on a curve to soften the impact of grades. For example, students in a geology class could evaluate websites linked to geologic topics for extra points. Extra credit was offered in at least one other course.

2. Curricular Content

Curricular content referred to the course objectives and materials to be covered during the course. These would include assignments (directions, assessment strategies), supporting course materials, and assigned activities. A qualitative audit of these archived courses showed a rich array of curriculum. A majority of these courses involved a downloadable syllabus.

Grading strategies revealed a broad range of assessment methods, in addition to the more traditional quizzes (with true/false, multiple choice, and essay questions). There were take-home essays and online labs, with contents based on lectures, film discussions, and readings. There were Web-based source evaluations. An accounting class offered computerized assignments. An automotive course involved a mid- and final-term dealership evaluation based on the work learners did at dealerships around the city, along with daily work record reports and online participation. Except for one course, all assigned a grade for learners to participate in discussions online.

A creative "Heritage Project" exhorted students to explore an aspect of the students' own respective heritages. Multi-cultural film reviews enhanced the learning, and a "Cultural Plunge" let students explore a piece of culture that was outside their own usual activities. Group projects in a jazz course involved learners conducting research on a time period of jazz's development and presenting a digital file of that work to other learners. In another innovation, a biology instructor asked his learners to create multiple choice tests based on their section of the curriculum. He would respond to their ideas as if he were the student taking the exam. That assignment surfaced a number of misunderstandings about the course materials in a creative way.

Other learners would take each other's multiple choice exams in order to learn the material. This twist on the memorization, drill, and practice offered a fresh way to learn. The honor system was evoked in relation to the posted solutions to assignments available online. Learners were asked not to talk about quizzes directly in online interactions either, in order to protect the learning in the class.

Group work was required for a number of the courses in terms of collaborative projects. This entailed use of virtual teaming at times, with students working together via telephone, email, and online collaborative spaces like the Virtual Classroom. For others, there were clear face-to-face meetings and logistical uses of the online classroom to help in their planning, telephone number sharing, drafting, and mutual scheduling. Students were often preassigned to groups (which may have had basic names like "Group 1" and "Group 2" or more creative names like those based on colors "silver, red, gold, green, blue, copper" or even those named mysteriously such as "Leonardo, Redi, Galen, and Golgi"). The more unique (vs. generic) names seemed to evoke a greater sense of identity and group pride.

Midterm group projects involved MS Word and PowerPoint slideshows of "Jazz from the 1900s – 1940s"; these were presented online to an appreciative audience of peers, with students printing these out and letting others know of their enjoyment and learning. Issues-based collaboration sessions brought students together into instructor-assigned groups to research specific curricular issues (different types of parasites, faith and meaning matters, and political issues) and to present their findings to the class. A few instructors enforced the group aspects of the work by giving a base score to the groups for their shared work, and offering substantive feedback. Individual scores were extrapolated by subtracting points for non-participation days. Individual students cooperated with each other even outside the structure of group work. Peer critique of student papers was also another common example of student cooperation.

Online lectures varied from the highly-detailed to those presented as mere outlines of the materials that were covered. Some lectures were lists of questions. Others offered sophisticated layout methods to make the text more accessible, with the use

of headings, subheadings, bullets, and colored fonts. A few included graphics in the text file lectures.

Few assessment measures seemed to be standardized, but rather, the assessments were closely linked to the specific curricular focuses. Some courses used timed multiple choice exams, as for the biology course. Others required PowerPoint presentations, essays, analysis of learning objects, and others. Discussion questions had a distinctly unique flavor: "How is cool distinguished from bop? Who were the principal hard bop musicians? How did their music differ from cool jazz? Describe how cool jazz evolved on the East coast and on the West coast. Who were the principal proponents? What were the players trying to achieve?"

Virtually all of the courses involved the use of URLs to other sites, to connect learners to expert lectures, news articles, music samples, audio files, live Net performances, film clips, graphical images and surveys, truly a multimedia selection. Instructors focused on tying the course learning to the outer world—with several encouraging their students to be politically active, vote, volunteer their time for worthwhile organizations, to learn more about the issues, and to apply social awareness to their thoughts and actions. For example, one health-based course hosted a very active discussion board that covered issues of veterans and their access to medical care, Gulf War syndrome, homelessness, lack of health insurance, and bureaucratic challenges in terms of access to healthcare. "*Remember, the only way things can change is if we all voice ourselves, including on election day, but also to write letters to our elected officials*," wrote another instructor.

One instructor required his students to read a biology-based article from *The New York Times* once a week and to offer a summary and analysis of each in order to relate their learning and thinking to timely issues related to the curriculum. Students in a political science class, after watching *Quiet Rage*, suggested that "disobedience training" would be important for citizenry and also suggested that peers should write to a person incarcerated in a U.S. prison. A geology professor gave a brief history of distance learning and his ideas about it, and then he made the world the classroom: "Geology is a field science as well and the field is anywhere you can observe and think about geologic processes and products. The field is where YOU find and make it." The learning was practically applied in other ways. For example, one medical laboratory technology class covered ways to improve hygiene and prevent the spread of disease and infection.

In a jazz course, learners were required to write three concert reports. They were to visit community venues such as restaurants, jazz clubs, and others for live jazz performances. They were then to post their findings and evaluations in short reports online. The instructor had a forum for these works to be posted. While this forum was full of postings, there were no instructor responses—only the acknowledgment that he would record them. There was no proof of any of the learners reading each other's postings, possibly because that was not required.

Yet, this assignment allowed the learners to go out into the world as jazz enthusiasts, to support the industry, to savor the variety of performances, and to integrate their learning with the world. Interestingly, students posted comments to each other as they apparently met at the same venue and "recognized" each other in a sense because others in the jazz club were taking notes. No guest speaker was brought on to offer live commentary. Transcriptions of presentations by guest speakers are seen as low cost ways of collecting course contents (Hassell-Corbiell, 2001, p. 156). However, learners were sent out to capture real-world learning on their own.

Instructional designers also should help learners see the macro environment or larger picture, according to the gestalt principle. According to Tufte (1990, as cited in Lohr, 2000), a good design was composed of informational detail accumulating into a larger coherent structure. Part of the Blackboard™ site offers external links to relate the learning in-class to an outside reality. Instructors post links to news sites, professional organizations, relevant articles, and off-campus resources. The gestalt principle involves the following guidelines: "designs that establish the lay of the land for the learner; outline menu structures; thematic design (use of similar fonts, colors, and

graphics throughout an instructional environment); proximity and repetition to group-related information, and metaphors or organizing themes" (Lohr, 2000, p. 52).

Uses of examples. Online learners were offered former students' sample work in only two of the 22 courses analyzed. One course offered a sample discussion board imported from a previous class. Students were cautioned against posting in this sample board. Another instructor offered a sample bibliography for learners to use. It was unclear if prior learners had given their permission for the use of their work as that was not mentioned.

Moral reasoning. Online learners engaged in a surprising amount of values and philosophical debates—about issues such as the power differentials in society, the unfairness of certain policies, the confusions of modern morals and faith issues. There were lamentations for the state of the world and ideas on how to try to improve the world of the future. Osguthorpe and colleagues (2003) suggested that moral principles must underlie all instructional design, particularly if transformative learning was the goal. The authors called for a "conscience of craft by striving for excellence beyond that which a client may demand" (Osguthorpe, et al., 2003, p. 20). Mere competency may lead to "mimetic instruction," but conscience formation will lead to a higher level of output, one that may lead to "transformative instruction" (p. 21).

The role of the students in these online classes seemed to be that of citizens of the world, engaged, passionate, and active. In terms of how much power students had to affect the direction of the course, instructors took note of their requests with differing levels of responsiveness. In a majority of classes, some students' postings went unanswered by both the instructor and peers. Some queries were left dangling, without a clear feedback loop. Requests by some students were turned down—such as some requests for an explanation of a quiz and the instructor's refusal to share online because of a history of learner cheating on his tests.

Closing the feedback loop had been found to be an important part of student satisfaction. Instructors achieve this by responding to student work point-by-point. Several faculty asked learners to copy and paste the original questions or ideas about which they were responding before posting a response, and that enhanced comprehension and clarity. This also served to acknowledge the original writer's concepts. Having a complete feedback loop also enhances the idea of reinforcing all students to participate. Overly selective responses may leave some learners feeling left out. For satisfaction, the responses also need to be substantive, to engage the heart of meaning, rather than a brief comment or mere acknowledgment. In some circumstances, however, even a basic acknowledgment may be sufficient to reinforce instructor presence and involvement.

Learners could introduce new learning and post ideas and request extensions for assignments, often without apparent censorship or nervousness, but in terms of substantive changes to the curriculum, learners did not appear to have any influence. One hybrid course directly addressed student empowerment. Students were empowered through the courses by the expression of respect for their opinions. They were given access to specifics on their grading, so they could contest their grades through the use of information. Instructors seemed to pay much attention to the setup of course grading. They offered notes on how they would grade as well as detailed tables with grade equivalents. The student's level of control in the class may affect his/her sense of inner motivation. "Some Web-based lessons allow students to choose which instruction they receive, making more individualized learning possible" (Bonk and King, 1998, cited in Weston and Barker, 2001, pp. 15 - 21).

Learner control. For online tutorials, best practices included the principles that "students control the process" by selecting lessons based on self-assessment, diagnostic tests or instructor feedback; the "number and degree of difficulty of problems are geared to the individual student" with thorough explanations at every step; the "form of the program is effective for learning" with randomized problem selection from a particular set and the avoidance of "a shortcut that gives a false sense of mastery" (Schwartz, 1982, p. 143). Instructor feedback is a central part of quality instructional design. Empowering students may help simulate the four-walls situation of voli-

tional learners making independent choices moment to moment. Schwartz also suggests that instructors be able to develop and modify pre-packaged programs that are brought into a learning environment (Schwartz, 1982, p. 143).

3. Planned and Unplanned Student Interactivity

This section involved intercommunications between the instructor and learners, learners and learners, and learners with those outside the class (albeit related to school work). Some interactivity was asynchronous while others were synchronous. Technology-based training (TBT) often required interactive dialogues which might be "reactive, proactive, or mutual" (Schwier, 1993, cited in Hemphill, 2000, p. 53). One way to look at self-regulated learning behavior was by the interplay of feedback and performance over time (Butler and Winne, 1995, cited in Hemphill, 2000).

Acclimation. Often, online instructors created ways for new learners to acclimatize to the online learning courseware and the subject matter. An online tutorial and library-presented tutorial for newcomers to online learning might take care of the Bb acclimatizing. WashingtonOnline's Virtual Campuses (WAOL's) Week Zero concept was also used through the class's availability before the quarter for learner access and exploration.

One instructor connected learners to the WAOL online resource for learners. One of the instructors mailed out printed "getting started" letters to his students at the beginning of the quarter. A range of strategies brought learners into the respective subject matters. A healthcare instructor acclimated students into the complexities of public healthcare issues by having them take an opening week survey about their ideas about health. One instructor posted "Navigating the Online Course" files. Others used introductory forums to post learners' reasons for taking the course, their progress in higher education, hometown origins, educational and career ambitions, hobbies, and hopes for the course.

Student home pages (text, graphics and animated gifs hosted on the Blackboard™ servers) were used with fewer than half of the courses. Learners were required to respond to each other in this virtual "icebreaker." Here, learners could build their home pages using Bb and upload a photo, movie clip, animated gif, or some other personalizing digital information. These tended to be personalized, often with learners' favorite web links (i.e., Star Wars, dolls, news, etc.) Others posted their favorite anime hero/avatar. These sites played into a sense of shared humanity, and learners commented in depth about each other's postings. There seemed to be an awareness of the instructor's presence in at least one class that directly required home pages. This instructor wrote summary postings at the end of each thread related to the homepages.

Two instructors used the strategy of asking rhetorically why learners should care about their courses, in this case, a geology course and a multicultural studies one. The "Who Needs Geology" forum offered a way to surface learner knowledge and attitudes about this field, and allowed the instructor to explain the relevance and applicability of the field to modern life. Another instructor asked, "Why Multicultural Studies?" He addressed the potential resentment of students to have to take this mandatory course, but followed that with the observation that we all now live in a global world, and to connect constructively would require a multicultural understanding. In online learning, some instructors use what is known as "rule-based personalization" or the use of "profile forms" that learners must fill out before accessing a site (Hung and Nichani, 2001, pp. 40 - 44). Instructors have learners post their prior knowledge about a particular subject matter.

The move to mechanize online learning using artificial intelligence had been pushing in this direction of personalization. "Rule-based personalization can go many levels deeper by tracking the students' content area expertise, the kinds of information sites usually accessed, the assignments undertaken, the lecturers from various disciplines consulted, etc. By keeping a history of the students' activities, the e-learning environment would be able to recommend timely and appropriate resources and materials for the students' learning. It would also be able to recommend directions for the students, for example, possible projects or assignments in which the student would most likely be

interested. This can be achieved by having the system search databases both locally and internationally. It could also recommend research areas of interest and associate these areas with special interests groups, a function related to the collaborative filtering-based personalization" (Hung and Nichani, 2001, pp. 40 - 44).

Need for a "confusion area." A student, demonstrating online sophistication, requested a "confusion area" where learners could have their questions addressed. This early ascertaining of student knowledge might enhance instructor responsiveness and sensitivity to learner needs. The ideas posted in this forum not only took a political point of view of geology, but also an international one, bringing in seismic activity from various continents. Some postings were fanciful, with the observation that the flaunting of jewelry is just a "wearing of geologic substances."

One class offered a "student lounge" for learners to share messages, and there was no sign that the instructor ever intruded on this student space. Instructors had various approaches to welcoming learners. Some answered learner self-introductions point-by-point by acknowledging their interests and other contents of their self-introductory posts. One instructor surveyed her students about their level of experience with an online course.

Support resources were offered to learners. A "Help Forum" was made in one class for learners to post their questions; a similar "Anything I can Help with?" forum offered point-by-point support for every query posted. They could do so anonymously in order to safely ask questions or make provocative comments. In one class, an anonymous learner chided peers for buying into a privileged dialogue model where only those who were loud and interrupting would be heard.

Practice exams that were not assigned any points were offered for students to practice taking an exam and submitting it without any troubles. Folders and exams could be viewed by learners in one science course, but these were available only for a time and were not to leave the building. The on-campus distance learning helpline number was given out in several courses. An "Advice" forum was set up by an instructor for students to address issues about how to do well in an online class. The learners brought up issues of time management, meta-cognition about learning, the use of note cards to organize writing ideas, and other insights. This was mostly a student space, with few interjections by the instructor as moderator.

Findings of the archived course audit echoed the research. "Editorship styles varied with the faculty member. Some were pretty hands off and 'invisible' on the list, acting more as go-betweens, bundling messages together or forwarding them as they arrived to the list as a whole without comment. Others were much more proactive from the beginning, suggesting topics for discussion, posing questions to the list, and commenting on what students had submitted" (Huehner and Kallgren, 1999, p. 49).

Instructors sometimes used the earlier first two weeks of a classroom's forums to set up expectations for student learning. One instructor used a "Thought Fallacies Forum – Unit 1" to get learners to surface and discard fallacious logical approaches. This forum was to set up a positivist, empirical approach to truth necessary for a clearer understanding of the biological sciences. Students shared a rich display of fallacious thoughts from the acceptance of rumors to superstitions to coincidences—relating Dr. Pepper to prune juice, believing in weight loss pills, wearing charms for luck, and going to psychic fairs. Other instructors emphasized the need to substantiate ideas for "educated opinions" and useful and civil debate. Some instructors required researched stances with full citations or annotated bibliographies. Others advocated the need for "proofs" as a standard of thought and soundness of argument.

Online faculty and ethics issues. "Students are more vulnerable than our researchers who may be paid and can, in any case, withhold cooperation. And we hear occasionally of instances of abuse of a teachers' authority: publishing students' work as our own; using others' ideas as our own; loading the evidence in favor of our views through selective use of data; propagandizing; breaching the confidentiality of data supplied by students. There is good reason, then, to extend our interest in professional

ethics from research to teaching" (Wilson, 1982, p. 269).

A no-surprises approach. Many announcements by instructors seemed to focus on a "no surprises" approach. One instructor highlighted the quirks in a textbook to prepare learners for what to expect. An instructor clarified that she would not be working on weekends and holidays, so students should not expect a quick turnaround on postings made late on Friday, for example. In a show of caring, one instructor offered an ergonomics guide for healthy setup and use of a home office with computers. Researchers imply a "no-surprises" rule for online learners. Given the disembodied learning and the lack of corporeality of the online classroom, learners often require a precise explanation for all assignments and work, particularly in grading. The fit between the learning and the assessment methods should be close. "Instructional information should also be clear and salient (message) and contain little that is irrelevant or distracting (noise)" (Hemphill, 2000, p. 53). Instructors also needed to be hyper-present with as short a turnaround time for messages as possible and explanations for absences. Having course materials posted early helps learners situate themselves in this online environment. "It is preferable to have a copy of the course outline available even before the class begins, in order to give students an overview of what to expect" (Harrison and Bergen, 2000, p. 59).

Instructors often played the role of intermediary between the technology and the students. When the automatic grading of essays on Bb caused confusion, an instructor intervened and made corrections. When test randomizations of questions made it hard to decipher test results, an instructor stepped in. Indeed, a number of student questions had to do with how to submit homework through the Dropbox, how to access bug fixes, how to continue study during server off-times, and how to address glitches in terms of access to exams.

While archived messages might not fully capture the heat of the exchanges of a live class, these documented interchanges showed learners willing to share their emotions, values, politics, and perceptions. In one criminal justice course, the instructor supported the students in developing a more complex view of the world, with less polarized ideas. He addressed values issues and issues of principles. He did not advocate one way of thinking, but seemed to head towards exposing students to a real world sensibility. The instructor often asked directive questions but then stepped back to let students address the issues.

Instructors communicated with learners as a group in a variety of ways technologically—through broadcast emails, announcement postings, and changing online classroom structures like Discussion Board forums. There was a clear effort at inclusiveness. One instructor signed off at the end of the fall quarter: "P.S. Happy Holidays, Merry Christmas, Happy Hanuka (sic), God Yule, Felice Navidad, Whatever!" Another signed off a course with a Pacific Northwest sort of wish: "I wish you rainy days and excellent focus as you bring it all to a close."

Instructors often took a relativist stance in interpreting social reality for learners. Instructors seemed to often balance an "intertextuality" with competing texts and complex understandings, occasionally interjecting to prod students to respond in more depth, to cross-reference information from various sources, support learner insights, and ask questions.

Few outright contradicted learners. In one philosophy of religion course, the instructor clearly suggested that moral views assignments would be opinion-based papers, lightening any perceived pressure that learners might have to respond in any particular way. In the courses that featured more positivist worldviews, however, as in the sciences, instructors were much clearer about "correct" and "incorrect" responses.

One automotive instructor asked learners to take a more systems view when diagnosing the cause of a melted catalytic converter: *"What did you find to be the cause of the melted cat? Remember that if you simply replaced the cat without finding the cause of the original problem it is likely that the new cat will also fail in the same manner!"* The directive question would lead to more insights, but the instructor did not interject with any detailed explanations.

Missed responses. A greater depth of engagement was observed in courses with more instructor engagement. However, in virtually every course, there was. Inexplicably

missed messages offered well within the time allotted. Instructors did not have any clear closing of forums except possibly by moving them to the bottom of the Discussion Board area as a deadline came and went. That lack of clarity sometimes allowed messages to be tagged on at the bottom of the forum where there was no indication these were ever read or acknowledged, in terms of the feedback loop. It should be noted that in face-to-face conversations, certain lines of thought and ideas might be dropped, too.

The depth of the postings varied, some from a few sentences to some upwards of 1,000 words per one posting. Instructors did emphasize the role of learners mentoring each other, and it seemed that some instructors let that play out without their hyperpresence. One instructor surfaced the importance of collaboration in the online classroom by discussing the importance of forming a community of cooperative learners. "There is a spirit to learning that only emerges when we can share the experience with our fellows." That said, in one course, the instructor only had students post their work in the discussion boards and never clearly responded once to any of the contents in the online classroom. In another, an instructor just launched a question per forum and disappeared for the exchanges.

Most instructors were referred to by their first names. Many posted messages and signed off using their initials for the first and last names. One instructor, jokingly, posted "PROF" in front of his name when he was referred to by just his surname in the classroom, but actually had students use his first name in most other interchanges. One faculty member was referred to with affection by his first name with the appendage "dog" after it to express student closeness. This was for a cohort-based course hybrid with regular face-to-face meeting times.

Housekeeping. Online instructors served a kind of herding function online, too, by reminding learners to label their work; to meet deadlines, and to post work in the correct forums. A calculated redundancy appeared in many of the classes, with repeated deadlines, assignments, and exhortations in a number of venues: announcements, forums, and apparent broadcast emails mentioned by the instructors. Housekeeping messages also involved out-of-class issues, such as server downtime notices, a planned power outage on campus, messages from a book sales representative, a campus emergency preparedness drill for an earthquake, and a guest visit by a local university's administrator.

Instructor unavailability. At least half of the instructors posted messages to their classes about their absences from campuses due to professional conferences or retreats, out-of-town trips, illnesses, family commitments, or injuries. Those messages reinforced the concept of instructor presence/non-presence for learners. Explaining absence seemed to be a fine strategy for showing instructor concern and sense of responsibility regarding the course.

Instructor communications with individual learners ran a gamut of content. One instructor posted an email exchange with campus administrators about how to create downloadable files for students in her announcements areas, to share a message that started out as an individual student query with the entire class. Many were queries about work required for a course, so another instructor had to clarify that posted information about a required portfolio was incorrect for this particular quarter in this cohort program.

One instructor directed a student away from overwork: "It is an attempt on my part to achieve a balance between learning and busy work. Working through the aspects of each mineral is critical to learning about them. Preparing a complete table to present for all of them begins to approach labor." Some faculty used labor-saving responses that referred learners to pre-published information in the online classroom that the students had overlooked. Faculty did not accept all student suggestions. For example, a student asked for a formal class survey at the end of the quarter, but the instructor declined.

Student privacy protections were not always upheld in the online classes. In these 22 courses, several students' personal assignment or cumulative grades were released in public discussion board forums (albeit as a result of posted student queries). It was clear that other specific grade challenges were handled privately.

Peer-to-peer communications showed lively debates, personal one-on-one interchanges, varying degrees of camaraderie, and shared mutual support. The largest peer forum had over 246 messages. Classrooms varied in terms of amount of student postings, with one fully-online class featuring only 25 messages all quarter while others ranged in the hundreds.

One course had no student messages posted in its Week 10 discussion forum, and in Week 9, only 3 of the 4 participating student groups actually posted their work. A clear gradual decline in student engagement could be observed. This could have resulted in part from the lack of personalizing data in the lectures and the mere outline regurgitations of textual materials. There was a lack of asides, colloquialisms, personal sharing, and jokes by the instructor or the learners.

While instructors might be available, personable, and invested in student success, a disengaged online persona might lead to a lowering of student investment and motivation. Another instructor used forums for students to memorize facts and regurgitate the ideas into small groups, then post their responses to the discussion board for sharing. Ironically, there was no evidence of student sharing. There was only one response—that of a student who noted that their group had the wrong group number heading. Beyond that, there were no questions, comments, kudos, or interactivity.

Humor. In more highly interactive online classrooms, humor was a common aspect of the discussion boards. Learners in a geology class laughed over the "sacrilege" of a student accidentally breaking off a piece of a gravestone and observing that as an example of weathering. In one student's Bb home page, she posted a photo of a cat with a green "bob" of the peel of a green grapefruit skin over its head like Cleopatra. This philosophy of religion student wrote, "This is not a picture of my cat, but she does represent the philosophical question, 'Why am I here?'"

Learners in an automotive course shared funny experiences, such as stories about a car accident, a student's junk car breakdown, and a customer finding out a part had been stolen from his car when his engine would rev but the car would not move. An instructor used humor to encourage participation in the classroom, saying, "It's a bad sign in a discussion when someone starts talking to themselves. Someone keep Randy from being lonely!" An automotive student joked about a customer whose car had bad exhaust valves, "Well thankfully the lady is going to sell the car to someone that is not our customer. So if nothing else at least we won't have to do any more head jobs on this POS." One instructor labeled the last week of his course as "the final spasm of a global tectonic geography episode!"

Group work. At least half the instructors assigned group work, projects that needed to be achieved in coordination with others in the course. One collected answers by different groups albeit with the same set of questions for all. The Discussion Boards were used to view the groups' findings. Others took more creative approaches by having learners use multimedia to present on historical topics or case studies. Each group seemed to have its own issues and personalities at play in engaging the academic subject matters.

Students posted some unsolicited comments about their learning. One student wrote, "I have a confession to make: I'm addicted to this discussion board, and will go through withdrawal if I have to go two days without it...and it won't be pretty." A peer quipped in response, "Do they make a patch for DB (Discussion Board) withdrawals? Maybe some kind of pharmaceutical help?" Another also expressed enthusiasm about a course: "This class is so fascinating! Just going through all the posts on the discussion board has been very educational in itself. There are so many well-rounded opinions and so very much to decipher. Nearly all of the arguments in the text and via class discussion have been very provoking and challenging. Needless to say, it has been a pleasure to have a class that defeats boredom and deals with such a relevant issue." Another commented on appreciating the amount of time she had to figure things out, without the time pressure of a face-to-face classroom. She also appreciated the flexibility of the schedule. Others disliked the asynchronicity, the lack of real-time interactions. Another student felt that Bb was

not compatible with other software technologies.

Instructor availability. To compensate for some of the adjustments necessary to thrive in an online environment, several instructors made it a point to be highly accessible. One instructor in a spring quarter course welcomed students to contact him for discussions over the summer, after the course had wrapped. This invitation for extracurricular conversation might well enhance connectivity in this distance situation (Anson, 1999). Some had announced on-campus office hours (two weeks was the maximum), but many were merely available online. One instructor posted when she would be available online to respond to student works.

Outside class communications. Outside class communications apparently play an important role in hybrid courses. However, in fully online courses, many of these interactions seemed incidental, a byproduct of completing assignments in off-campus venues or accidental meetings at on-campus events.

Requests by students. Learners seemed fairly comfortable asking their instructors for support and elaboration, work samples by former students, grade corrections, technological troubleshooting, deadline extensions, clarifications on answers for graded quizzes, access to library resources, and late bookstore books. Others asked for more Discussion Board forums for easier readability.

Peer sharing. Learners in these archived courses often shared insightfully with their peers and instructors. Learners posted their ideas, struggles, values, and experiences. Some learners addressed each other with "earthlings" and other endearments. The flattening effect of textual communications online might have added to that perception of anonymity and "safety." For many courses, a spirit of intellectual inquiry existed, and issues were faced directly, without personalization of the ideas and surprisingly with no outright personal attacks. In a class on the philosophy of religions students, posted their own religions of origin, religious experiences and speculations, in-family religious tensions, a range of professed beliefs, and the role of doubt in their lives. They asked profound questions about which values were worth keeping and which should be discarded. They probed the meaning of human existence.

Insider language. The use of field-specific language in each of the courses created a sense of bonding among the learners around a shared understanding. In jazz, the students shared insights about 16th note rhythms, syncopation, flatted fifth notes of the scale, and the phenomena of call and response in improvisational jazz. Speech language pathology students conversed about morphemes, phases of language development, speech pathology, and apraxia. For example, in an accounting class, in a forum for one chapter, there existed a definition of terms, a rationale for certain actions, and cause and effect clarifications. In these exchanges, "contingent liability," "note receivable," "account receivable," and "security for a loan" were bantered about. Anti-infectives, autonomic nervous system, corticosteroids, chemotherapeutics, and antipyretics were evoked in another course. Students differentiated between soul-making theodicy, and free-will theodicy in yet another course. Acronyms were dropped quite plentifully in various discussion situations. Language precision and logic were also factors critiqued by the instructors.

4. Observable Instructional Strategies

This interpretive section examined the approaches online instructors use. Instructional strategies might be observed through the instructors' assignments, adjustments made to accommodate various learners and learning styles, the class mood, how conflicts are resolved, student decision-making and empowerment, and communications from the instructor.

This section may involve a degree of interpretation, as the original instructors of the archived courses would not be interviewed about their approaches. Field-centric observations cannot be made because of a lack of expertise in these unique fields.

Students engaged in a variety of skills in these online and hybrid courses: reading, listening, experiencing live events, research, digital presentations, live presentations, essay writing, analytical writing, rote memorization, test-writing, online dialogues, in-person and virtual teaming and collaboration, essay exam test-taking, sketching and drawing, and engaging in timed online quiz-

zes. Hands-on work involved solving automotive car problems and setting up medical lab work. Instructors acknowledged various learning styles through a creative mix of approaches and assessments for the classes. Listening Questions in a music class had students engage with various multimedia works and to share their insights and personal appreciations.

Moods in the classes varied from a light playfulness to seriousness. In one multicultural class, for example, a student playfully joked with an instructor and called him a "little genius" for separating the males and females in the class into different groups that disallowed users from each group spying on the other. This sense of camaraderie and good will also purveyed the automotive class, with students sharing good-naturedly and generously about their learning.

Future Issues

DL administrators and instructors may wish to audit their courses to see which areas their instructors and course designers may develop for a more effective high-interactive learner experience. An audit may raise instructor discussion of online teaching strategies to reach their diverse learners. It may raise the need for the inclusion of more cutting edge technologies. An audit may be part of an effort for promoting greater instructor responsiveness and purposive use of mixed pedagogical strategies.

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Curricular Structures and Student Interactivity Online Course Evaluation Instrument

Research Approaches
1. Structure
2. Curricular Content
3. Planned and Unplanned Student Interactivity
4. Observable Instructional Strategies

1. Structure

Structure: The structure aspect of an online course refers to the courseware and tools which help present and deliver the learning. It also involves the supporting materials for the course, from the textbook to videos to other elements, as these form some of the parameters of the course. Course policies (both institutional and instructor/ course-based ones) also form a structure by setting expectations and parameters for learner behaviors and actions within the course.

Types of Structure	Details	Observations from Archival Course Research
Courseware	Web pages, WEB-CT, Blackboard or others	
Courseware Tools	These refer to the course features offered within the courseware system.	
Supporting Materials Required for the Course	Textbooks, videos, CDs or DVDs, software programs, models, tools, kits, etc.	
Simulations	These refer to models of processes that may be computer simulations. These may also refer to "scenarios" which learners go through to "role play" a situation.	
Software Used for Files	PowerPoint, Portable Document Files, Visio, Excel, Wordprocessing programs, Flash, Sound files, Video files, etc.	
Interactive Television (ITV)		
Video Recording		
Instructor Self-Intro and Packaging/Branding ("Leadership" Structure)		
Non-Online Course Structure	Face-to-face meetings, fieldwork, off-campus meetings, field trips, video recording sessions, lab sessions, and others	
Instructor Policy Structure	Are course policies mentioned in detail? Are they set at the beginning, or are they brought up as issues arise?	
Institution Policy Structure	Are the school's policies addressed?	
Other Technologies	Emails, faxes, Web cams, digital scanners, ebooks, personal digital assistants, and others	
Graphical Course Environment Design Elements		

Potential Research Questions:

- How is the student treated structurally? Is the course directive? Is the course self-directed for learners? What mix of instructor directiveness and learner self-direction is there?
- Are there discrete phases in how the course is set up? Is there a chronology to the course? What directs the chronology (textbook ordering, or others?)?
- Does the student role evolve during the course?
- What structural supports are offered for student learners?
- Are students linked back to the campus for support services? Learning support?
- Does the learning extend beyond the cyberspace walls of the class?

2. Curricular Content

Curricular Content: This refers to the course objectives and materials to be covered during the quarter-long course. This would include assignments (directions, grading strategies), supporting course materials, and assigned activities.

Types of Curricular Content	Details	Observations from Archival Course Research
Syllabus		
Course Schedule / Course Trajectory Course Objectives	Is the course organization based on a textbook? Is there any self pacing, or are deadlines set and enforced by the instructor? Is the course time-bound? Is there any open entry and open exit?	
Grading Strategies		
Assignments		
Group Projects/Collaborations Assessment Strategies	What assessment strategies are used? Are the test measures objective or subjective (or to what degree of both)? Are the tests standardized or customized?	
Original vs. Packaged Use of the Internet Amount of Feedback from Instructor, Debriefing of exams	Lectures, tests, digital videos, sound files, textbook references, films, graphics, assignments, simulations, etc. External links?	
Guest "lecture" or Q&A		
Research Projects		
Scenarios and Role play References to Student Services and Support Functions on Campus "Learning Objects" Use of Examples	Types of Learning Objects: "tell, show, ask or do"	
Use of Student Sample Work		
Other		

Potential Research Questions

- What is the student role as defined by the curriculum?
- How much power does the student have in affecting the direction of the course? Changing its pace? Bringing in new learning?

3. Planned and Unplanned Student Interactivity

Planned and Unplanned Student Interactivity: This section involves intercommunications between the instructor and learners, learners and learners, and learners with those outside the class (albeit related to school work). Some interactivity will be asynchronous while others may be synchronous.

Types of Interactivity	Details	Observations from Archival Course Research
Online and Course Acclimation	Are there any efforts to let new online learners acclimatize to the courseware? Are there efforts to let students acclimatize to the course curriculum?	
Learner Intro or "Ice Breaker" Methodology		
Instructor Communications with Learners as a Group Instructor Communications with Learners as Individuals		
Types of Technologies for Communications	Email, fax, telephone, listserv, or others	
Student-to-Student or Peer-to-Peer Communications Outside Class Communications	Are outside class communications apparent or not?	
Length of Chain Discussions in the Discussion Board	Are conversations carried in depth, or are conversations pretty "shallow" structurally?	
Hybrid or Not?		
Instructor Office Hours?		
Synchronicity		
Asynchronicity		
Other		

Potential Research Questions:

- What is the level of in-depth sharing between learners?
- How much personal information is brought into play by the instructor about himself or herself?
- How much personal student information is brought into play?
- What is the level of privacy protections for student information?

4. Observable Instructional Strategies

Observable Instructional Strategies: This interpretive section examines the approaches online instructors use to convey their information to learners. This strategy may be observed through direct learning strategies and assignments, adjustments made to accommodate various learners, the class mood, how conflicts are resolved, student decision-making and empowerment, and communications from the instructor. This one may involve a degree of interpretation, as the original instructor of the archived courses will not be interviewed about their approaches per se. This is why supporting facts will be used to bolster interpretations.

Types of Instructional Strategies	**Details**	**Observations from Archival Course Research**
Strategies	Links to prior knowledge, rote memorization, reflection, action learning (via projects), repetition, group discussions (constructivism), dialogues, collaboration,	
Acknowledgment of Varied Learning Styles		
Mood(s) of the Class		
Conflicts and Resolutions		
Student Decision-making and Empowerment Instructor Feedback Loop Other		

Potential Research Questions:

- How is the student treated in terms of instructional strategies?
- What types of learning are reinforced in this course?
- How are the needs of students with different learning styles addressed?
- What is the role of interpersonal communications in the learning?
- What is the general mood of the class?
- How are conflicts resolved?
- How are questions addressed?
- Are students empowered? If so, how?
- Are students disempowered? If so, how?