

College Online Developmental Reading Instruction: Creating A Path to Independent and Active Learning

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Online courses require students to be independent readers and efficient learners. College students who need developmental reading lack these qualities; consequently, faculty do not generally view developmental reading courses as appropriate for an online format. However, an effectively designed online course based on best practices can engage less confident students and also promote active learning. The goal is to provide ways to enhance students' college-level reading skills and to develop independent learning. This paper discusses one instructor's online reading course that uses Web tools to create an active learning environment.

When creating an online developmental reading course for first-year traditional and non-traditional college students, an instructor is faced with a new challenge. Online courses require students to be independent readers and efficient learners, and, in general, first-semester college students are encouraged to take face-to-face classes, especially if they are not strong readers (McWhorter, 2009) or independent learners. However, the development of independent learning skills is necessary for students to succeed (DeBraak, 2008).

Many students have ineffective, passive reading habits (Paul & Elder, 2008). In fact, 47% of all college-bound students taking the ACT exam are not meeting the benchmark score of 21 that indicates preparedness for college-level reading (ACT News, 2009). When learning online, students need to self-regulate and meet specific deadlines. Self-regulation in underprepared students may be a distinguishing factor between those students in developmental and regular classes (Ley & Young, 1998). The challenge then is to

create and teach an effective online college developmental reading course with Web tools that promote reading comprehension skills, student efficacy, and independent learning.

A Taxonomy for Learning Theories

No single theory is used when designing an online course (Ally, 2008). Some aspects of an online developmental reading course involve using behaviorist strategies to teach the “what,” such as vocabulary drill and practice; cognitive strategies to teach the “how,” or process and principles of active reading; and constructivist strategies to teach the “why,” such as higher level thinking and transfer of reading skills to other contexts (2008). Ertmer & Newby (1993) view this combination of theories as a taxonomy for learning.

Metacognition Theory

For students to become responsible for their own learning, they must be able to use metacognition—the process of being aware of one’s own thinking patterns (Mayer 1998; Sternberg, 1998; Yorke & Knight, 2004). In an online reading course, metacognition involves using appropriate strategies to focus on following directions, taking self-tests, writing periodic self-evaluations and reflections, and completing online practices that provide immediate feedback. Online learning allows students to read at their own pace and reflect on what they have read, to make errors without direct observation of others, and to learn from their errors without feeling competition with fellow students. For example, online reading students log in to an exercise center on a daily/weekly basis where they can complete multiple exercises until mastering a particular skill. By “competing” with themselves for mastery, they build confidence.

Social Presence Theory

Besides educational theories, affective elements that promote a sense of belonging in a cyberspace classroom are germane to student course satisfaction. Teacher-student and peer

immediacy behaviors positively affect student perception of the online learning environment (Johnson & Card, 2007). Effective online teaching and learning require participants to project a social presence that helps them connect and relate to one another (Johnson & Card 2007). Instructor and student immediacy skills can be exhibited in a variety of ways, both verbal and nonverbal. For example, a powerful way to create social presence is timeliness, or quick turnaround time, when providing students with personal feedback (Johnson & Card, 2007). When doing so, greeting students and addressing them by name also reflect high immediacy (connection with others) . Students can also project social presence in their online discussion groups by using cohesive language, such as “we,” “our,” and “us” and acknowledging what other group members have to say by agreeing or disagreeing.

Asynchronous Interaction

One of the strong advantages of online learning is that students can interact but can do so at different times, resulting in what is known as asynchronous communication. On the other hand, synchronous communication, interacting in real time online, is not required for meaningful interaction (Smith, 2003). In an online reading course, students can develop a sense of community with each other and the instructor through a number of asynchronous communication and learning tools available to them such as video clips, PowerPoint presentations, digital flashcards, discussion boards, collaborative groups, and class blogs.

Brief video clips

To introduce each lesson, an instructor can create a brief one-to-two-minute video clip as a preview to the chapter, explaining a concept or illustrating some idea to arouse students’ attention. These brief introductions can encourage students to activate prior learning and can predict what a reading selection may be about. The brief video clip provides students with both visual and auditory tools that stimulate activation of memories on both cognitive and affective levels (Medina, 2008). Students can view the video more than once and create an overall mental framework of the

chapter they are to read. This mental outline helps them to see how major ideas are connected and serves as a guide as they read (McWhorter, 2009).

Narrated PowerPoints

To accompany brief video clips in an online course, an instructor can also narrate PowerPoints with colorful graphics, another visual/auditory way to prepare students for a reading assignment. This pre-reading encourages them to predict, note, and reflect on the organization and content of a chapter or article (McWhorter, 2009). In so doing, they are developing metacognitive strategies. Furthermore, the use of narration is another example of teacher immediacy as the students can hear the instructor's voice and become more familiar with the person behind it through the tone, inflections, accent, and other auditory cues and identifiers. This is a form of projecting social presence to connect with students (Johnson and Card, 2007).

Electronic Flashcards

Since intensive vocabulary study is an essential part of a developmental reading course, providing electronic flashcards with the instructor's auditory pronunciation of each word is also helpful to online reading students. In a face-to-face classroom, students have the advantage of hearing an instructor pronounce new vocabulary words each week. In order to simulate that advantage in an online "classroom," instructors can create electronic flashcards that allow students to look at each vocabulary word, listen to its pronunciation, predict the definition, and then click the "flip over" button to confirm their definition. Both visual and auditory tools help reinforce word definitions and provide "maintenance rehearsal," repetitive review for retention (Lefton & Brannon, 2009, p. 329). Since this electronic learning technique focuses on drill and practice, a behaviorally active strategy, but not on deeper levels of meaning, students can make semantic maps of words to promote fuller understanding of both the denotative and connotative meanings of words. When students connect words to associations, they are cognitively active (Mayer, 1999) and are more likely to make sense out of word meaning. This kind

of cognitive strategy is one way to create a memory link for later retrieval (Lefton & Brannon, 2009).

Camtasia/On-screen Video Recorder

Use of the Web tool Camtasia provides instructors with a way to make their own tutorials for students that explain how to navigate some aspects of an online course or to complete various activities throughout the semester. This software allows the instructor, to produce a downloadable video with audio. For example, an instructor can use this visual/auditory method to give students a "Course Tour" the first day of class and later to show them the kinesthetic technique of annotating a passage effectively.

The Discussion Board

Online classes often include a discussion board, a tool that allows students to post comments about a topic and to interact with each other. Discussion boards give students the opportunity to see the comments of other students, allowing them to react to, agree with, or confirm what others post. As a pre-activity each week in an online developmental reading class, instructors can ask students to predict what a particular article will involve and post a question on the course discussion board about the week's topic. After students have read and annotated the article, they can return to the discussion board and post what they perceive to be the main idea of the article and react to any major or minor supporting details that particularly interested them, surprised them, or confirmed what they have experienced. The advantage of the discussion board is that it is an asynchronous, interactive tool and is open to the whole class. Developmental reading classes tend to be small—usually under 20 students making discussion boards an ideal forum for the exchange of ideas. However, instructors of larger classes can also create a number of small groups, all assigned to their own discussion boards.

Collaborative Groups and Interdependent Learning

A "wiki" is an online collaborative space where students can view and edit each other's work. This type of Web tool allows

students to complete assignments together in an asynchronous way so that their schedules do not interfere with this type of peer interaction. To promote collaboration, an instructor could assign students in each group an activity that involves multiple levels of thinking. Group members choose the part of the assignment they want to work on. For example, a vocabulary assignment can involve researching a word's origin (etymology), connotative and denotative meaning (semantics), word structure (morphology), and the word's role in a sentence (syntax). Group members enter the wiki and choose from a chart one of these linguistic aspects to complete. They add and edit their information in the wiki. All parts of the assignment need to be completed; those who enter the wiki first have first choice of what part of the assignment to complete. On the due date, the instructor can view the entire completed assignment in which each group member has participated. Another example of peers working together involves students collaborating to write a paragraph using vocabulary words they are studying on a topic of their choice. In the paragraph, each group is responsible for providing context clues to indicate meaning.

The Online Class Blog

The online class blog provides students with a chance to share their thoughts about something they have read or can serve as an outlet for them to describe some of their problems with comprehending the reading material in another course. Students can also use this tool to express ways they have used the skills and techniques from their reading course in their other courses. Doing so involves transfer of knowledge by use of constructivist strategies (Mayer 1999). For example, students can share a reading technique or strategy that has been useful to them in another class, a strategy that didn't seem effective for a particular reading assignment, or vocabulary words from their reading course discovered in other contexts.

Interaction with the Instructor: Email, Chat, Video Conferencing

Instructors can encourage students to use the course management system's email to ask them questions or to seek more

extensive explanations than those provided in their textbook or online directions. However if online students need more immediate one-on-one interaction, using synchronous video conferencing tools, such as the popular Skype (Skype.com) and Elluminate, is a readily available option. From this writer's experience as an instructor of both online and face-to-face classes, it is possible to experience the same amount of interaction with online students as one can experience with students in traditional settings. In fact, the very nature of an online course may require more teacher/student communication as each party has to participate to create social presence.

Consistent Content Organizational Patterns

Online teaching can create a predictable and consistent way for developmental students to learn. Weekly modules in the course "content map" can be developed so that there is a definite pattern for learning objectives and outcomes. Employing an effective, consistent learning pattern, an instructor might ask students to do the following each week: (a) view a brief video clip that introduces a concept in a textbook chapter; (b) view the narrated PowerPoint that focuses on that concept and which provides specific examples; (c) read the assigned chapter or article while annotating; (d) review the main points of the article and create an electronic concept map, a visual way to organize main ideas by using mind mapping software; (e) answer comprehension questions and get immediate automated electronic feedback; and (f) transfer these specific skills to the reading and analysis of another article, which also includes creating a mind map that summarizes the main idea and supporting details.

Overall, students can be in charge of their own learning through a course management system, such as D2L. Online the instructor plays the role of mentor and "scaffolder," guiding and supporting students to become more independent learners by giving them personal feedback on a regular basis as they interact with course materials (Rasmussen, 2001). In addition, the electronic grade book tool allows students ongoing access to their daily grade average in the course. By clicking "Grades" on the course page navigation bar, they see not only their grades for each assignment

but also their grade average on a daily/weekly basis. Incorporating these activity patterns each week gives developmental students a sense of control and prediction regarding their learning and the ability to see their own progress in a consistent way.

The Virtual Reading Lab

Students can be linked to an online textbook companion (virtual reading lab) that provides further vocabulary practice and reading comprehension exercises. For example, after students study the topic of inferential thinking in the textbook or e-textbook, they can then practice this important skill through the textbook companion virtual lab exercises. These online practices reinforce the textbook lesson and also provide electronic grading and feedback to students. Once students have satisfactorily passed a number of exercises, mastery tests are available for them in the “lab” to complete and they are a further means of providing automatic feedback in the form of an explanation of each answer. Students can see progress first-hand and know immediately if they need to return to their textbook for further explanation and practice.

Self-evaluations

At the beginning of a spring 2009 online reading course, this writer asked students (N = 15) to informally identify their approach to academic reading by referring them to Kathleen McWhorter’s (2005) list of active and passive reading behaviors. These active reading behaviors include specific strategies that are employed before, during, and after the reading of an assignment whereas passive reading behaviors do not involve interaction with the text before during or after the reading process. After reviewing this comparison of reading approaches, the majority of students indicated that they were more passive than active readers (Table 1). By the end of the semester in a final self-evaluation that asked the open-ended question, “Are you an active or passive reader?” all (N = 15) of the students rated themselves as more active readers than passive ones.

Table 1

Open-ended Question: Are you an Active or Passive Reader?

Reading Approach	Active	Passive	Mixed
Beginning of course	N = 2	N = 11	N = 2
End of Course	N = 15	N = 0	N = 0

These students were asked to support their answers with explanatory details. Their self-reports indicated that the specific strategies they had practiced throughout the course gave them the metacognitive tools to read more effectively, thereby making them more confident readers.

Conclusion

In teaching a fully online *Reading for College Success* course for the past seven semesters, this writer found by reviewing student self-evaluations, the course evaluations completed by students, and final grades that those students who opt to stay in the cyberspace classroom can develop into independent, active, efficient learners with improved reading comprehension skills. These students learn to self-regulate by using a “toolbox” of strategies that they can, in turn, use in reading assignments for all of their other classes.

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