Chapter from the book *E-Learning - Instructional Design, Organizational Strategy and Management*

Downloaded from: http://www.intechopen.com/books/e-learning-instructional-design-organizational-strategy-and-management

Interested in publishing with InTechOpen?
Contact us at book.department@intechopen.com
Effective eLearning and eTeaching — A Theoretical Model

Maureen Snow Andrade

Abstract

Distance learning is increasingly becoming an option for learners that were previously denied higher education opportunities due to elitist systems, cost, academic preparation, or personal circumstances. It is also a means to help nations meet goals to increase the percentage of individuals with post-secondary education in order to address workforce needs. However, learners and instructors often have concerns with their ability to be successful in a distance learning environment. This chapter presents a theoretical model for eLearning and eTeaching aimed at helping learners and instructors successfully navigate distance learning courses. Examples of course activities corresponding to the model components are shared. A qualitative analysis of learner self-reflections demonstrates the efficacy of the model in terms of increased autonomy, self-regulation, and targeted skills.

Keywords: distance language learning, self-regulation, eTeaching and eLearning, online instructor training, distance education

1. Introduction

Knowledge, an end in itself as well as the surest route to higher wages and longer lives, is measured by degree attainment and school enrollment [1]. eLearning provides access to higher education for a wide range of learners. These include traditional students in university classrooms, individuals in the workplace seeking to formalize their work experience through the pursuit of a degree or to transition into a different career path, and those who need flexible
scheduling options or prefer to not participate in traditional learning environments. These learners can select courses and degree programs from institutions of higher education in their local areas or from providers across the globe. eLearning increases access, which has historically been denied to many due to elite education systems, and offers choice—choice in providers, programs, scheduling, cost, and content.

Elitist views of tertiary education are receding [2-6], with recognition of the benefits of a well-educated workforce in terms of economic development, economic stability, health and well-being, and decreased crime [7], factors that are encouraging governments to lower the barriers to higher education and set goals for degree attainment [7,8]. The appeal of eLearning is readily recognized as instrumental in these endeavors [8-11], evidenced by increased enrollments in online courses. In the United States, for example, the number of university students taking an online course increased from 1.6 million to 7.1 million in a 10-year time span (2002-2012) [12]. Many of these learners are nontraditional in terms of age, marital condition, and employment status [13].

In spite of demand, involving university instructors in developing, implementing, and teaching online courses can be challenging due to concerns with quality, nontraditional methods of interaction with students, low student performance, pedagogical skill, technological knowledge, workload, time intensiveness, large class sizes, and course ownership [14-16]. Learners may struggle with the discipline needed in eLearning contexts, which are generally less structured than face-to-face settings, feel intimidated by the technological expertise required to navigate courses and submit assignments, lack motivation, or simply be convinced that learning in a more traditional format in which they can engage in class with other learners and an instructor is preferable.

This chapter introduces common challenges with eLearning in terms of learner success and instructor expertise, and suggests solutions to these challenges through the framework of self-regulated learning [17-21] and the supporting theories of transactional distance [22-24] and collaborative control [25]. The chapter provides a guiding model for course design and pedagogy, illustrated with specific course content and activities. The theoretical model of eLearning and eTeaching helps learners overcome barriers to success while parallel training based on the same principles prepares instructors to facilitate effective online learning experiences. Learner and teacher self-reflections were examined to identify the presence of the model’s components, and are shared to demonstrate the model’s efficacy. Additional recommendations for evaluating the model are provided. The approach is illustrated with online English language courses and a related instructor training course; however, the model and its elements can be applied to courses in any discipline and be examined quantitatively or qualitatively to determine its effectiveness in facilitating learner success.

2. Problem statement

While global growth in technology-based learning, and online learning in particular, presents significant opportunities for learners to access higher levels of education that were previously
out of reach, and for institutions wanting to address challenges associated with the resources needed to expand their physical infrastructure to accommodate enrollment increases, or desiring to take advantage of outreach beyond their state or national borders, the fact remains that many stakeholders are concerned with the efficacy of this delivery method. Anecdotes of negative distance teaching and learning experiences abound on many university campuses in spite of growing evidence to the contrary and increasing interest and participation. Views toward distance education tend to be polarizing, as expressed in the following statement:

At one end of this continuum, we detect what some might argue is an overly sanguine view of what distance education has already achieved and how much it has influenced pedagogy and the academy. At the other extreme is the pessimistic perspective that this phenomenon is a scourge threatening the quality and integrity of academe [26].

Related to the latter extreme, concerns involve accreditation, institutional support, scalability, technological literacy, instructional strategies, rigor, expertise, and fear of taking missteps into this new territory due to possible negative repercussions. Each of these issues has and can be addressed. The focus of this chapter is on online teaching and learning, and specifically, approaches that situate both learners and instructors to have a positive experience.

3. Theoretical foundations: Literature review

In all educational contexts, every effort must be made to ensure that learners succeed. This involves pedagogical considerations, understanding learner backgrounds and approaches to learning, instructor skill, and course design and management. Distance learning presents its own set of factors related to success such as a less structured experience for learners in that they do not meet regularly in a classroom; a possible learning curve related to course delivery technologies, which is a potential concern for both learners and instructors; different strategies for sharing and discussing information than would be present in a face-to-face context; and specific to teachers, the need to adapt and expand on traditional face-to-face instructional tools. In effect, novice online learners and instructors must be prepared and supported in this new learning endeavor. While success for students in any learning context, and particularly in distance learning, is dependent on a number of factors, not all of which are within the control of an instructor, much can be done to anticipate and alleviate challenges inherent in an online course. Similarly, instructors who have a solid understanding of online teaching approaches and the ability to apply them will be able to provide a more positive learning environment for their students and fully enjoy their teaching experience.

Self-regulated learning [17-21] is an educational theory which can be maximized in an online class to provide learners with the needed scaffolding to manage their learning. The theory of transactional distance [22-24], from the field of distance education, provides insights into the relationship among the course, learners, and instructor, and how the psychological distance created by the physical gap between the learner and teacher can be mitigated. The concept of collaborative control [25], most frequently applied to distance language learning, addresses
the myth that online learning is synonymous with independent learning (although this is a possibility), and suggests strategies for collaboration. These three concepts can be applied to course design and instructor training to maximize the opportunities associated with distance learning and assist learners and instructors in developing the requisite skills and abilities for success.

4. Self-regulated learning

The concept of self-regulated learning has been applied to the teaching and learning process to increase student achievement across age, educational levels, and delivery modes [17,18, 27–33]. It is most commonly defined as the ability to control the elements and circumstances that affect learning [17,18]. A useful framework is the six-dimension model, which consists of motive, method, time, social environment, physical environment, and performance [17,18, 19–21]. These dimensions address the questions why, how, when, with whom, where, and what. Figure 1 provides additional details about the dimensions.

Figure 1. The cycle of self-regulated learning.

Another commonly applied self-regulated learning framework consists of three phases—“the forethought phase refers to processes and beliefs that occur before efforts to learn, the perform-
ance phase refers to processes that occur *during* behavioral implementation, and *self-reflection* refers to processes that occur *after* each learning effort” [21, p. 67]. Forethought is similar to *motive* in that it encompasses goal setting, motivation, and examining beliefs about learning. Performance is most closely related to *methods* as depicted Figure 1; it involves strategy identification, implementation, and monitoring of the strategies applied to determine their effectiveness. Methods might also include consideration of areas such as time management and social and physical environments in that learners must determine strategies to improve their performance by using time effectively, getting help from others, and eliminating physical distractors where and when they study. Finally, *self-reflection* consists of reviewing learning outcomes and comparing them to a standard. It is similar to the performance dimension in Figure 1, which involves examining the achievement of goals and learning outcomes and determining the next steps.

While both frameworks are valuable, the former is particularly helpful in guiding learners. The specificity of the various areas needing consideration assists learners in analyzing their current practices in relation to their study approaches and making needed changes by following the cyclical process of goal-setting, strategy implementation, control of time and environmental factors, and review of performance. Goals can be set related to any of the dimensions (e.g., methods, time, social environment, physical environment) depending on individual strengths and weaknesses. Methods involve strategies for processing and acquiring knowledge and improving skill. In the case of language learning, strategies might focus on vocabulary learning with note cards, using the context to guess the meaning of words, recognizing error patterns in written grammatical usage, or using headings to find the main ideas in reading passages. Outside of language study, more general learning methods can be applied such as various strategies for reading (e.g., previewing, mapping main ideas and supporting details, asking questions, paraphrasing, and summarizing), studying and recalling information (e.g., listening, identifying transitional phrases, note-taking), writing (organization, idea development, revision, and editing), improving performance on assignments and tests (e.g., following instructions, understanding distractors in multiple choice tests, organizing a response to a short answer or essay exam question), and interaction and discussion (teamwork, collaboration, class participation). Many methods or learning or strategies are applicable across content areas.

The six-dimension framework can serve as the foundation to online course design to assist learners in controlling the factors that affect their learning concurrent with gaining content knowledge for a given discipline or increasing skills to perform specific tasks. Course assignments involving goal setting, examining motive for learning, gaining awareness of various learning strategies, recognizing the role of the social and physical environments in learning, and monitoring and reflecting on performance can be integrated into the course. This design approach can increase the achievement of learning outcomes [27,29], particularly if the self-regulated learning components are required rather than optional; students rarely complete optional assignments. For many students, considering various approaches to learning is completely new, as illustrated in the following quotation from an English language learner
who discusses his use of methods of learning, specifically, taking reading notes and composing study questions.

Taking this course helps me to know how important it is to use my study materials. Throughout my junior and high school, I always thought that using my study materials was a waste of time because I thought that I wouldn’t really understand if I used my study materials compared to asking my teachers to explain how to do the activity. Every time I read an assignment my mind was not really focused. I didn’t pay attention so I ended up not knowing what the assignment was all about. I didn’t make notes of what I read or write down questions as I read the assignment or paragraph. But today I can say that using my study materials is really important.

This quote provides evidence that the learner has become more autonomous through the use of methods of learning. Instead of relying on the teacher to explain assignments, he has recognized that he can read, take notes, and write down questions to help him understand the material. This indicates self-regulation.

5. Transactional distance and collaborative control

Two other theories have relevance to online course design and instructor support and can be integrated with the self-regulated learning framework. The first is the theory of transactional distance [22-24]. This theory has three components: structure, dialogue, and autonomy. Structure is provided by course materials, content, assignments, and deadlines, which are fixed prior to a course being made available to students. Structure is a helpful pedagogical tool as it provides learners with predictability in determining how the course is organized, sequencing of instructional modules and assignments, and deadlines for assignment submission. Generally, courses are designed so that each lesson has the same sections and various pages in the course have the same formatting, similar to a textbook. This helps learners know what to expect as they progress through the course. A course syllabus is also part of the structure as it guides students through the course and its requirements and provides needed information about policies, procedures, requirements, and grading. Structure can also be provided through communication for the purpose of guiding and supporting learners. This communication is referred to as dialogue, and includes any type of exchange or interaction in a course. It can be among the learners or between learners and the instructor. It includes course features such as discussion boards, peer review of assignments, instructor announcements, instructor feedback on assignments, student questions, e-mail, and live conferencing. Dialogue provides socialization, particularly through peer interaction. Instructor dialogue can motivate learners, help them identify their strengths and weaknesses, and assist them in making needed improvements.

The amount of structure and dialogue in a course affects autonomy, which is defined as choice characterized by elements of self-direction. Lower levels of structure and dialogue support greater levels of autonomy. Some learners are able to function well with low levels of structure and dialogue while others need greater support. Autonomous learners are able to determine
learning goals and steps for reaching those goals. They have both instrumental independence and emotional independence [22-24]. In other words, they can progress through the course with little help and need little encouragement. One could expect that learners might become more autonomous over the weeks they are enrolled in an online course as they understand expectations and gain confidence in their ability to be successful. Instructors can facilitate this confidence building. The goal of structure, dialogue, and autonomy is to support the achievement of learning outcomes and prevent student attrition. The theory of transactional distance has similarities to that of self-regulated learning. The self-regulated learning framework in Figure 1 provides a type of structure for learners to help them set goals, practice strategy application, make use of dialogue (i.e., the social environment) to get help when needed, and self-evaluate in order to have greater capacity for autonomous learning.

Finally, the concept of collaborative control [25] provides greater understanding of the social environment aspect of self-regulated learning and the dialogue component of the theory of transactional distance. Rather than conceiving of distance learning as an independent activity, collaborative control acknowledges that learners can learn from and help each other and also that the instructor can facilitate learner interaction and success. Help-seeking is a positive practice as long as learners are not overly dependent on others. They need to recognize when they need help, identify the best sources of help, and evaluate the effectiveness of the help received [34]. As the name of the concept implies, collaborative control occurs when learners and the instructor collaborate to complete tasks, thereby improving learning outcomes. Instructors must be aware that the goal of collaboration is to encourage greater levels of self-regulation or autonomy so that learners can make sound choices and have the confidence to succeed. However, as a common criticism of distance learning is the purported lack of social interaction and exchange among learners; thus, course designers and instructors should always be aware of opportunities to provide for this aspect of learning.

6. Theoretical integration

Figure 2 demonstrates the integration of various aspects of the three theories. Online courses that require learners to engage in forethought (goal-setting), performance (strategy application and monitoring), and self-reflection (review of progress); that are designed with a specific structure (organized content), opportunities for dialogue (peer and instructor communications), use of the social environment (help-seeking), and collaborative control (learner and teacher collaboration on tasks), all of which are facilitated by the instructor; and that use these features to help learners gradually develop greater autonomy (capacity for self-direction and making choices), self-regulation (ability to control factors affecting learning), and targeted skills and knowledge (course content and related outcomes) as they set goals, apply what they are learning, and reflect on their learning demonstrate how the three theories work synergistically to improve the online learning experience.

The model demonstrates how the theories of self-regulation and transactional distance and the practice of collaborative control can guide distance learning and teaching approaches.
Although the design and instructor facilitation features in the model overlap, each concept has distinct characteristics that help to inform design choices and instructional approaches. The model can be applied to both online student courses and related training for online instructors. In the latter case, the learner is the instructor.

7. Applying the model: Principles and practice

To address the challenges inherent in eLearning, course designers and instructors must consider ways to facilitate effective student learning and course completion. In the process, students enrolled in the course can acquire lifelong learning strategies with broad applicability. Additionally, administrators, or those responsible for assigning instructors to courses, must ensure that these instructors are prepared for and skilled in online teaching. This can be
accomplished through required instructor training that models the student online learning experience.

This section of the chapter identifies principles based on the theoretical model presented in Figure 2. The principles are designed to help learners be successful eLearners and to prepare instructors to make the transition from traditional pedagogies to those that facilitate eLearning [27,30]. A primary consideration for instructors is communication with learners through dialogue and response strategies [22-24]. The discussion is organized around the three areas of the model of eLearning and eTeaching (see Figure 2). For each area, key principles are identified with examples of applications for a student course and an associated teacher training course.

8. Individual learner activities

While every online course contains a variety of learner activities, the focus in this section is on those related to the three phases of self-regulated learning: forethought, performance, and self-reflection. For purposes of delineating this portion of the model, both students and instructors are considered learners; both are applying the principles of self-regulated learning in their respective courses—students are learning about a specific content area or discipline or acquiring a related skill while instructors are honing their online pedagogical skills. The courses provide the opportunity for individuals in each group to set goals, apply strategies, and reflect on their performance. An additional benefit of these self-regulated learning activities for instructors is that they are experiencing what their students will be doing in the student course. It is strongly recommended that these activities be required so that all learners will benefit from them.

The forethought stage of self-regulated learning can be integrated into online courses and online teacher training through activities that help individuals examine their beliefs about learning, diagnose their strengths and weaknesses in the subject area or in relation to needed teaching and learning strategies, and to set goals [28, 29, 31]. The six-component framework in Figure 1 can help learners generate areas of focus for goals as can some type of diagnostic evaluation. The forethought stage should be initiated at the beginning of the course, possibly in the introductory module of a course. It helps set expectations for learner responsibility and raise awareness of course content.

Next, the performance stage involves the use and monitoring of strategies. Strategies should be introduced and linked to the assignments in the course. For example, if students are required to compose a writing assignment, part of the instruction for the assignment might include strategies for revision and editing or learning how to evaluate the appropriateness of sources [34]. It could also involve discussion of the particular genre expected, e.g., a critique of an art exhibit for an art class or the summary of an academic journal article for a psychology course. In keeping with the six dimensions of self-regulated learning [17-21], strategies could also be introduced related to effective time management or evaluating the physical environment to determine its conduciveness to learning. In the teacher training course, strategies would
include those related to online pedagogies such as using whole-class feedback rather than responding to students individually, providing supplementary materials to address identified learner weaknesses, facilitating a discussion board, or incorporating the use of a new form of technology [27, 29, 30].

The third and last area, self-reflection, is designed to help learners evaluate the benefits of the various strategies they have applied. They can then examine reasons for their outcomes and modify their methods accordingly. “Overall, the available research evidence suggests that promoting self-reflection, self-regulation and self-monitoring leads to more positive online learning outcomes. Features such as prompts for reflection, self-explanation and self-monitoring strategies have shown promise for improving online learning outcomes” [35, p. 45]. As such, this is critical for students and also important for teachers as it involves taking the time to carefully consider teaching approaches and also to experience directly what they are asking their students to do. Possible activities for each of the three areas are summarized in Table 1.

<table>
<thead>
<tr>
<th>Principle</th>
<th>Student Course</th>
<th>Instructor Training Course</th>
</tr>
</thead>
</table>
| Learning can be improved through identifying the purpose for learning, goal-setting, and examining beliefs about learning (forethought); learning, practicing, and monitoring strategies (performance); measuring performance against a self-imposed or external benchmark, and modifying goals and strategies as needed (self-reflection). | · Introduction activity in which learners post information about themselves, their background in the subject area, and their purpose for learning; posts can be written or oral (video recordings); learners are required to respond to a specific number of peer posts.  
· Appoint students to take turns to facilitate the discussion board throughout the semester to increase comprehension of the subject matter and help them gain confidence.  
· Introductory writing assignment stating previous experience with the subject area and reasons for wanting to learn more. Peer or teacher response to assignment. | · Introduction activity in which teachers post information on a discussion board about themselves, their teaching or professional backgrounds, and their purpose for teaching online; posts can be written or oral (video recordings); teachers are required to respond to a specific number of peer posts.  
· Appoint teachers to take turns to facilitate the discussion board throughout the semester to practice the skills they will use in the course they are teaching.  
· Introductory writing assignment stating previous experience with online learning and reasons for wanting to learn more. Peer or trainer response to assignment. |
### Principle
Learning can be improved through identifying the purpose for learning, goal-setting, and examining beliefs about learning (forethought); learning, practicing, and monitoring strategies (performance); measuring performance against a self-imposed or external benchmark, and modifying goals and strategies as needed (self-reflection).

### Student Course
- Completion of an instrument identifying learners’ self-beliefs about learning (e.g., intelligence is fixed vs. intelligence can be developed) [36].
- Diagnostic survey to help learners identify strengths and weaknesses related to the subject area or to the use of academic learning strategies.
- Identification of goals related to strengths and weaknesses in the subject area or learning in general; goals should be specific, measurable, achievable, result-oriented, and time-bound (SMART).

### Instructor Training Course
- Writing assignment may include asking teachers to provide their philosophy of teaching, perspectives of online teaching and learning, previous successes with distance education as a student or a teacher, or any other prompt that helps teachers dialogue with each other and create community.
- Online survey listing various online teaching practices, particularly those relevant to the course, from which teachers determine their strengths and weaknesses.
- Identification of goals related to what teachers hope to learn in the course and what they anticipate their needs to be in terms of online teaching based on the survey.

### Performance
- Strategy instruction integrated with course content; learners apply strategies as they complete course assignments.
- Activity choices focused on the six dimensions of self-regulated learning (motive, methods, time, physical environment, social environment, performance).
- Opportunities to select appropriate strategies to accomplish course assignments.
- Learn about and practice methods for online instruction and responding to students. This instruction includes becoming familiar with the theoretical foundation for the course.
- Opportunities to adapt familiar face-to-face teaching strategies to an online environment.
- Introduction to technology-based instruction and application activities, including tools available through the course management system.
Principle
Learning can be improved through identifying the purpose for learning, goal-setting, and examining beliefs about learning (forethought); learning, practicing, and monitoring strategies (performance); measuring performance against a self-imposed or external benchmark, and modifying goals and strategies as needed (self-reflection).

Student Course
- Discussion boards, learning journals, or survey instruments that provide prompts for reflection on goals at regular intervals in the course (e.g., weekly, monthly, midterm, end of course).
- Opportunities to share reflections with peers or the instructor for feedback.
- Inclusion of goal modification and next steps as part of reflection.

Instructor Training Course
- Discussion boards, learning journals, or survey instruments that provide prompts for reflection on goals at regular intervals in the course (e.g., weekly, monthly, midterm, end of course).
- Opportunities to share reflections with colleagues or the trainer for feedback.
- Inclusion of goal modification and next steps as part of reflection.

Table 1. Activities for the Three Phases of Self-regulated Learning

9. Design and instructor facilitation features

Although learners engage in the three phases of self-regulated learning independently, and set goals and practice the specific dimensions of self-regulated learning (motive, method, time, physical environment, social environment, performance) largely on their own, the process is facilitated through course design and instructor dialogue. The four components of this part of the model—structure, dialogue, social environment, and collaborative control—have a theoretical basis, described in the previous section, and are built into the course design. They also have implications for instructor behavior.

As indicated earlier, the structure of the course helps guide learners and provides predictability while dialogue entails communication among course participants and the teacher for purposes of socialization and learning support. These two elements affect autonomy. Figure 3 indicates the relationship among structure, dialogue, and autonomy.

When structure and dialogue are low, the learner is able to make choices about learning independently. However, structure and dialogue may be needed when necessary information is not included in the course or if the information is incomplete, or when learners need greater levels of support. When structure and dialogue are high, autonomy decreases. As instructors work with students, they can tailor the instruction and support to the level of the learner.
through the use of dialogue. As the learners’ skills improve, the amount of dialogue will likely decrease. The following example demonstrates structure in the form of assignment instructions that are set in the course, and instructor dialogue that provides additional information to help learners successfully complete the assignment. Instructor dialogue can be provided as an announcement (oral or written), a supplemental page in the course, in a brief video, or in an e-mail to the class.

9.1. Assignment

Read the article about the spread of English as an international language and then write a one-paragraph summary of the main ideas. Organize your ideas clearly and upload the paragraph for your teacher’s review.

9.2. Instructor dialogue

In order to complete this assignment, you need to know how to write a summary. See the steps below to help you complete the article summary assignment.

1. Understanding the reading

The first step in writing a summary is to read through the article carefully and make sure you understand it.

• Check any vocabulary you don’t know

• Find the author’s thesis statement or main point

• Find the main idea (topic sentence) of each paragraph or section of the article

• Underline main ideas as you read

• Reread the article and take notes—use your own words; put exact words in quotation marks

• Explain what you read to someone else

Figure 3. The interaction among structure, dialogue, and autonomy.
2. Writing the first sentence

The first sentence of a summary follows a specific format. See the instructions and examples that follow.

• The first sentence of a summary includes the following:
  ◦ The author’s name—usually the family name only
  ◦ The title of the article, book, magazine, or chapter
  ◦ A restatement of the author’s thesis
  ◦ Examples:

• According to their article, “A Model for Self-regulated Distance Language Learning,” Andrade and Bunker claim that learning a language through distance education is a challenge due to the learner’s limited opportunity for real-life interaction.

• In “A Model for Self-regulated Distance Language Learning,” Andrade and Bunker observe that distance language learning is particularly difficult due to the lack of opportunity for learners to hear and use the language.

3. Completing the summary

When you are certain you understand the content of the reading and have practiced expressing it orally, and you have written your first sentence for the summary using one of the patterns, use your notes to draft the remainder of the summary paragraph. Be sure to review the paragraph carefully and edit as needed so that your language is as accurate as possible.

• Write a sentence or two summarizing each main idea of section of thought

• Put the sentences in the same order of the ideas in the original article

• Use transitions to connect the ideas

• Check your use of punctuation

• Check sentence structure, verb tense, and other grammar

• Add your reference list (see the writing tip on how to format references)

• Remember that a summary
  ◦ explains the main ideas of the original article in your own words
  ◦ does not contain your own opinion
  ◦ is usually 1/4 to 1/3 the length of the original

The assignment instructions assume that learners know how to write a summary. The dialogue, in the form of supplemental materials, provided by the instructor gives them specific steps to follow. The teacher also needs to include an example summary paragraph and instruction about reference list formatting. Even though the materials in an online course are
already established; in other words, the structure is present, skilled online teachers know their learners and recognize when additional information is needed. This situation is similar to using a textbook in a course; the teacher determines what to use from the textbook and what to add based on a needs analysis of the learner. As instructors teach a course regularly, they have a better sense of where learners will struggle and how to assist them. This is a principle that needs to be included in online teacher training and addresses the viewpoint that is sometimes present among instructors that online teachers are glorified graders. The opposite is true—effective pedagogy and interaction is critical in an online course.

The next example demonstrates how instructors can facilitate learning through dialogue in the form of response to assignments. The instructions for the assignment are an example of structure, complete with specifics for how to formulate the post, word count, and deadlines, while the instructor feedback guides learners toward better utilization of this structure so as to meet expectations for the assignment.

Assignment

Post a response to ONE of the following questions about the article you summarized. Clearly state your point of view and use information from the reading and your own experience to support your answer. Respond to at least two of your classmates’ posts. Your initial post should be at least 100-150 words in length. Responses to your classmates must be 50-75 words. Your initial post is due Monday at 11:59 pm. Your two responses to classmates are due Thursday at 11:59 pm. Be sure to check the discussion each day.

Questions

1. Is English an instrument for global economic expansion or does it simply increase inequalities between those who are proficient and those who aren’t? Explain.

2. Does the spread of English decrease cultural uniqueness across the world or does it serve to connect people across cultures and increase intercultural understanding? Explain.

3. Will English maintain its status as a global language or will another language supplant it at some point in the future? Explain.

Student post

English provides people with opportunities for education and better jobs. This is why I am studying English. I want to go to school in the UK. Then, when I come back home, I can get work and look after my future wife and children better.

Instructor dialogue

You have important reasons for wanting to improve your English skills. Please make sure you focus on the topic in the question. You have mostly talked about your personal reasons for wanting to learn English. You need to bring in ideas from the article, take a position on the topic, and support your viewpoint. These are skills that you will need in academic writing. The discussion board assignment is designed to help you practice and develop these writing skills. You also need to make sure your response is 100-150 words. Always make sure you read
the instructions and follow them carefully. If there is something you don’t understand, I am here to help. Please also review the example responses that I posted in the announcements this week. I look forward to your next post.

The instructor response example follows the sandwich approach, which entails starting and ending with positive comments (the two slices of bread) while the middle portion (the filling) provides specific recommendations for improvement. The purpose is to encourage learners while helping them improve. Instructor dialogue in the form of feedback on assignments can be individualized, as in the example above, or it can be provided to the entire class, which is the purpose of the announcement the instructor refers to. The whole-class approach allows the instructor to provide a more extensive response with examples and models. To do this, the instructor notes commonalities in strengths and weaknesses in the students’ interactions and provides feedback, examples, and direction to the entire class similar to what would occur in a face-to-face course. Some of this information, depending on the length, could also be posted in the discussion board itself—during the time period that students are doing the assignment. Students do need to know where to find the information, so it is best to have a common practice for this.

Providing a rubric for assignments and including it with the instructions also provides structure and helps learners know how they will be graded. However, often learners need to be reminded to examine the rubric carefully and compare their work to it. An option related to this is to use the practice of collaborative control to help learners develop their own evaluation abilities. Learners could be paired or assigned to small groups and asked to review and discuss each other’s posts and then evaluate them with the rubric, providing rationale for the scores assigned. Although students may tend to give each other high scores, the activity at least increases their awareness of the rubric and helps them explore common or differing understandings of it. This is also an example of how the social environment can be integrated into a course. Another way to use the social environment is to simply have an open discussion board in which students post their own questions about anything related to the course to other students. In this way, students can get help on their own that is not instructor-focused. This supports the development of autonomy and self-regulated learning in that they are selecting topics of need and taking responsibility for factors affecting their learning.

This discussion has included guidelines for instructors related to the components of structure, dialogue, social environment, and collaborative control. In the instructor course, structure is provided in the set course modules on various topics—introduction to the university mission and English language program, logistics about the course they will be teaching and the learning management system, understanding their role as online instructors, planning and preparing, and exploring techniques for response. Dialogue and the social environment are incorporated into the course design with opportunities for instructors to share perspectives on the information in the various modules such as how to apply the teaching strategies presented. Examples such as those shared regarding student posts and corresponding instructor feedback can be included in the course to help teachers see models of response. Additionally, strategies
for individual and whole-class response, use of technology, and other pedagogical information relating to the principles of structure, dialogue, social environment, and collaborative control should be included and practiced in the training course. The instruction needs to introduce these features, the philosophical foundation for the student course and related research, and also give the teachers the opportunity to discuss these areas much in the same way the learners are discussing the global nature of English in their discussion board in the example shared previously.

10. Developing learner traits

The goal of online instruction based on the model of eLearning and eTeaching is characterized in following quote: “The capacity to learn autonomously is seen to develop from a state of self-awareness and willingness to take an active part. In order for learners to achieve this state, teachers must also play their part” [37, p. 220]. The first component of the model accounts for the need to develop learners’ awareness and engagement by having them examine their purpose for learning, beliefs about learning, and by setting goals. They take an active part as they learn and apply strategies, monitor their outcomes, and modify their approaches. Taking an active part also involves the social environment and dialogue with others in the course. The model provides guidance for how instructors can “play their part” to help learners become more self-aware, fully participate in the learning process, and take control of their learning. Teachers facilitate this through practices related to structure, dialogue, the social environment, and collaborative control. They model these behaviors in the teacher training course.

The aim of the model of eLearning and eTeaching, reflected in the third component—developing learner traits—is to help learners develop greater capacity for autonomy and self-regulation, and to meet learning objectives related to the targeted skills and knowledge of the course. For teachers in a training course, the model assists in giving them direct experience with self-regulation and related theoretical components in order to understand the course design philosophy and how they can facilitate the goals of the model as they interact with learners.

In this section, I review possible methods for determining evidence of the model validity. The first possibility involves using the self-reflection instruments that are built into the course as a means to determine learners’ experiences and their views of their own learning. In both the student and the teacher training courses, participants are involved in self-reflection through some type of journal, discussion board post, formal paper, or video recording. These may be required at various points in the course such as weekly or at the middle and end of the term. Prompts for reflection can be specific to the course content, focused on learning in general, and be formative or summative as the examples in Table 2 illustrate. All of the examples are focused on the self-reflection aspect of self-regulated learning.
<table>
<thead>
<tr>
<th>Purpose</th>
<th>Reflection Prompt: Students</th>
<th>Formative Summative</th>
<th>Reflection Prompt: Teachers</th>
<th>Formative Summative</th>
<th>Model/Theory Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific to course content and activities</td>
<td>What did you learn about organizing a paragraph in this week’s lesson? How did it make a difference in the way you write?</td>
<td>Summative</td>
<td>How can you help students become more self-regulated? What types of feedback can you provide that will help students increase their self-regulated behaviors and strategies?</td>
<td>Formative</td>
<td>Methods Dialogue Social environment</td>
</tr>
<tr>
<td></td>
<td>What was the most helpful thing you learned about vocabulary study this week? How will you apply this in the future?</td>
<td>Formative</td>
<td>What did you learn this week about types of technology you can use to communicate with students? How will this make a difference in your teaching this semester?</td>
<td>Formative</td>
<td>Methods Dialogue Social environment</td>
</tr>
<tr>
<td></td>
<td>How did the course help you improve your academic writing skills?</td>
<td>Summative</td>
<td>How did the training course help you change your perspective of online learning and teaching?</td>
<td>Summative</td>
<td>Methods Performance</td>
</tr>
<tr>
<td></td>
<td>Review the diagnostic survey you took at the beginning of the semester and the goals you set based on the areas in which you wanted to improve. Evaluate your progress on your goals and explain what you will do in the next half of the course to continue to make improvement. This may include modifying your goals.</td>
<td>Formative</td>
<td>What strategies did you learn in the module for creating a community of learners online? Which of these will you use in your course? Why?</td>
<td>Formative</td>
<td>Forethought Performance Dialogue Social Environment</td>
</tr>
</tbody>
</table>

General learning/teaching strategies

Think about the readings you discussed with your whole-class. What do you think of the whole-class?
<table>
<thead>
<tr>
<th>Purpose</th>
<th>Reflection Prompt: Students</th>
<th>Formative</th>
<th>Reflection Prompt: Teachers</th>
<th>Summative</th>
<th>Formative</th>
<th>Model/Theory Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>classmates this week.</td>
<td></td>
<td>feedback approach?</td>
<td></td>
<td></td>
<td>Dialogue</td>
</tr>
<tr>
<td></td>
<td>Share one idea or insight</td>
<td></td>
<td>How is it similar to</td>
<td></td>
<td></td>
<td>Social environment</td>
</tr>
<tr>
<td></td>
<td>you learned from a</td>
<td></td>
<td>what you would do in a</td>
<td></td>
<td></td>
<td>Collaborative control</td>
</tr>
<tr>
<td></td>
<td>classmate. How will that</td>
<td></td>
<td>face-to-face class?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>insight help you be a</td>
<td></td>
<td>How do you think you might</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>better learner?</td>
<td></td>
<td>utilize it?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>How have you used</td>
<td></td>
<td>What can you do to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>feedback from your tutor</td>
<td></td>
<td>provide feedback to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>appointment to improve</td>
<td></td>
<td>students to help them</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>your language skills or</td>
<td></td>
<td>synthesize their learning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>solve a problem?</td>
<td></td>
<td>for the week, identify</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>needed areas of</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>improvement, and set</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>related goals? How can</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>you help students</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>recognize the progress</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>they are making?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>How will you apply the</td>
<td></td>
<td>How do you view your</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>learning strategies you</td>
<td></td>
<td>role as an online</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>practiced in this course</td>
<td></td>
<td>teacher? How can you</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>to future learning? Give an</td>
<td></td>
<td>apply your skill as a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>example.</td>
<td></td>
<td>face-to-face teacher to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>an online environment?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>What advantages and</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>disadvantages are there</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>to having the content of</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>the course set? How can</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>you respond to student</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>needs when the content</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>is already established in</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>the course?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Discuss the two most</td>
<td></td>
<td>Think about your experience</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>effective strategies or</td>
<td></td>
<td>this semester as an online</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>skills you learned in the</td>
<td></td>
<td>teacher. Consider the</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>course.</td>
<td></td>
<td>materials in the course</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>and the goals you set</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>for each unit. Reflect on</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>how your perspectives</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>have changed.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purpose</td>
<td>Reflection Prompt: Students</td>
<td>Formative Summative</td>
<td>Reflection Prompt: Teachers</td>
<td>Formative Summative</td>
<td>Model/Theory Elements</td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>-----------------------------</td>
<td>---------------------</td>
<td>-----------------------------</td>
<td>---------------------</td>
<td>-----------------------</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Comment on your goals and to what degree you achieved them.</td>
<td></td>
</tr>
</tbody>
</table>

Table 2. Self-reflection Prompts and Theoretical Connections

11. Research on model validity

One method of providing evidence of the efficacy of the model is to examine learner self-reflections. The examples below, from students and teachers, illustrate learner perceptions of various aspects of the model, and particularly the six dimensions of self-regulated learning (motive, methods, time, physical environment, social environment, performance). The examples are taken from weekly, midterm, and final reflections in the student class, and end-of-module and end-of-course reflections for teachers. The model elements are indicated in parentheses following each quotation.

Students

- I learned a lot of things through this wonderful activity about identifying values and setting goals. First of all, I need to understand my motivation before I set goals. Sometimes, it was difficult for me to set a meaningful goal for I did not understand my desire and vision. I was like a visitor without a compass and map, and I got lost. Therefore, I need to evaluate my motivation and needs before I set my goals. (Motive)

- I reviewed the goals I set for the course to see if I am making progress. I need to see if I have made any changes. I need to make some changes from what I have done before to now in order to get better grades. These are new goals for the second half: first, try to distinguish between important things and unimportant things. Second, try to improve reading speed, and the last one is improve on finding main ideas in readings (Performance, Methods, Target Skills)

- The course activities are good activities because these activities can help me to become a better learner. Reviewing the activities, I found that I learned a lot. For example, I found out my learning styles, my strengths and weaknesses as an English language learner, and my reading strategies. These three activities help me to study better. Besides, I found out how to schedule my study time and have a study plan and to study in short segments. These two activities help me to have a better time management. (Methods, Time, Performance)

- Online distance learning program are quite strenuous compared to traditional classroom learning, notwithstanding this fact I felt it was fun and balanced. The structures set up to help the student know, do and become is just awesome, most significant of all is sharing ideas and learning from each other, furthermore our speaking partners made it more interesting. (Structure, Dialogue, Social Environment, Collaborative Control)
Instructors

- My goal is to create an assignment where students write an explanation of the directions BEFORE they do it. Then they need to write a self-evaluation on how well they followed the directions. My hope is to get a better idea of how much they understand from the directions, as well as for them to better understand and evaluate what is expected of them and how well they are meeting these expectations. (Forethought, Methods, Target Skills)

- The whole-class feedback approach is helpful. There are sometimes patterns of mistakes and collective misunderstandings that we should recognize and respond to. I will use this approach and I believe students can really benefit from it. It is my responsibility to give them extra tips, advice, or even reviews so they can make progress. (Forethought, Methods, Target Skills)

- I have been taking notes on students’ individual weaknesses and strengths all semester. I can see how those who have followed my advice and have actively worked on their mistakes are actually improving faster than those who are going through the motions only. (Methods, Performance, Target Skills)

- I have tried individual and whole-class feedback. They both work well. The discussions have been one of the most effective ways for students to interact with each other. I would like to try video feedback and online office hours in the future. (Methods, Performance, Target Skills)

Compiling these comments and using qualitative analysis methods to determine categories and themes [38] can provide insights into the effectiveness of the course activities and learners’ evaluations of their success in achieving course outcomes. The examples above indicate clear evidence that students and teachers benefitted from the structure and dialogue in the course, the opportunity to examine their motivation, goal setting activities, engagement in the social environment, and the instruction and practice activities related to methods and strategies. Outcomes indicate that they acquired new strategies, increased their self-regulation behaviors, and achieved the target skills and knowledge for the courses.

Another way to measure the effectiveness of the model is to have students complete a formal survey with specific questions about course activities and then analyze the data. Questions might be both forced choice (e.g., multiple choice or ranking) and open-ended. Forced choice questions could consist of asking learners to rank the activities in the course grouped by model component (e.g., for dialogue/social environment/collaborative control, these could include the discussion board, video postings, peer review of writing drafts, group writing project), evaluate the instructor on a Likert scale (e.g., value of instructor feedback, response time, knowledge, quality of interactions), or the effectiveness of the course design and content (ease of navigation, technology use, organization of the home page, clarity of instructions). Examples of open-ended questions might include the following: What aspects of the course did you feel were the most valuable? What specific learning (or teaching strategies) were new to you and which did you have the most success with? What were the greatest strengths of your instructor? What suggestions for improvement do you have for your instructor? This approach is a little more structured than the course self-reflections, particularly if quantitative responses are
included. These can be collected over several semesters and the results compared to help inform administrators and designers of needed changes in the content and structure of the course.

Additionally, instructors should be given the opportunity to provide feedback about the course materials. As they are teaching, they will notice inconsistencies in the course, unclear instructions, portions of the course that students have difficulty with, and poorly worded or incorrect content and test items. They will also have suggestions for content changes and different pedagogical and presentation approaches. While course designers and administrators responsible for the course would not want to implement all of these recommendations or respond immediately except in cases where simple corrections or typos are needed, this feedback should be compiled and analyzed to determine needed revisions to the course. Also, if the course is part of a sequence of courses, feedback should be obtained from instructors teaching the next level course in the series to determine if the course and instructional techniques are preparing learners adequately.

Other ways to evaluate the model would be through course completion and test scores. The latter would be dependent on ensuring that instructors are rating student work and applying rubrics consistently in the case of assignments such as essays or projects. Comparisons could be made between courses in which teachers have been trained and those in which instructors have not been trained in the model or between courses with embedded learning strategy activities and those without.

12. Implications and conclusions

A limitation of the information presented in this chapter is that the model of eLearning and eTeaching has been applied to only English language learning courses and related teacher training courses, although the theoretical components of the model are well-established as being effective in improving learning in both online and face-to-face contexts [17-21]. Further application of the model should be extended to other disciplines and those using it should assess its value in helping learners and teachers become successful in an online context.

The model does much to address concerns with online learning and teaching from students and faculty members. It provides students with structure and the potential to improve their strategies and approaches to learning so as to be effective in a technology-based distance course. It addresses instructor concerns and myths about teaching online, particularly that online instructors are limited to a grading rather than a teaching role. It expands awareness on the part of both the learner and the teacher of the value of taking responsibility for learning and the role of autonomy, and addresses the misperception that distance courses involve largely independent study with no social interaction or learning from others. It also helps define the role of the instructor in an online course and indicates how instructors can facilitate autonomy through collaborative control, a concept expressed in the following quotation: “What matters most in language advising for autonomy, however, is the [teacher’s] ability to help learners make informed decisions about their learning without making those decisions
This is the goal of instruction—to help learners develop the capacity to make sound decisions about what and how to learn.

Evidence of the efficacy of the model has been established through a qualitative examination of learner and teacher self-reflections that are embedded into both the student and teacher training courses. This examination demonstrated that the elements of self-regulated learning, transactional distance, and collaborative control, when applied in English language learning and teacher training contexts, assists participants in goal setting, the application of new learning and teaching methods, reflection on these methods, and improved performance. Practices and activities involving dialogue, the social environment, and collaborative control support this process and provide critical elements for the development of autonomy, the acquisition of targeted skills, and overall, successful eLearning and eTeaching.

With increasing demand for higher education, and movements in the United States, the United Kingdom, Europe, and elsewhere to expand the numbers of individuals with post-secondary education [2-4, 8,9], eLearning will continue to grow to fill this need. Indeed, the use of technology, and specifically, online learning, is a strategy to reduce the time spent in class and provide alternate pathways that support degree completion by allowing students greater access to the coursework they need. This can help students avoid excess credits, address the common problem that courses are not offered when needed, not offered at convenient times, or not offered frequently enough [40]. Online learning is convenient to the schedules and lifestyles of today’s diverse learners in higher education [13]. However, those involved in its development and delivery must take action to ensure its success for all stakeholders. The model of eLearning and eTeaching is an important step in this direction.

Author details

Maureen Snow Andrade

Address all correspondence to: maureen.andrade@uvu.edu

Academic Programs, Office of Academic Affairs Utah Valley University, Orem, UT, USA

References


