

Motivating Online Information Literacy Students

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Deposited 02/07/2024

This is an accepted manuscript of an article published by Rapid Intellect Group, INC in *Academic Exchange Quarterly* published December 22, 2005 available at:

<https://rapidintellect.com/AEQweb/win2005.htm>

Citation of published version:

Daugherty, Alice L. (2005). Motivating online information literacy students. *Academic Exchange Quarterly*. <https://rapidintellect.com/AEQweb/win2005.htm>

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KEYWORD: INFOLIT

Motivating Online Information Literacy Students

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Abstract

The design of online information literacy courses should include various motivational strategies and techniques. Librarians should consider what motivates students in the online environment. This article presents a brief overview of Moore's theory of transactional distance and Keller's ARCS model of motivational design. Also included are factors in course design that affect student motivation, such as: visual design, content, and communication.

Introduction

Information literacy instruction is emphasized at Louisiana State University and implemented through a variety of methods such as course-related instruction, web-based tutorials, point of need instruction, and through LIS 1001, the Library Research Methods and Materials class. Credit-based library instruction at LSU began in the mid 1930's. Instruction for LIS 1001 is provided to students through two separate mediums: completely online and in an electronic classroom within Middleton Library. The online version of the class was established fall 2000. Since the inception of the online information literacy course more than forty sections of the class have been taught reaching over 1450 students. The Instruction Committee within the library hopes to add more sections of the course to the online environment. As information literacy instruction moves more towards a virtual pedagogy, librarians should consider what motivates students in the online environment, specifically in online information literacy classes.

Motivating students is an important aspect of teaching. In regards to student learning, motivation refers to the "inner processes that determine whether learners will engage in a task, the amount of effort they will expend, the length of time they will persevere and the persistence they will show when obstacles are encountered" (Jenkins, 2003, p. 32). The views that students who choose online classes are more motivated than their conventional counterparts are becoming more difficult to defend. With the development of course management software and the use of the Internet, universities are continually placing a higher emphasis on online learning. It is not uncommon to find traditional students selecting online classes because they are convenient to their schedules and they view themselves as competent in the online environment.

Intrinsic and Extrinsic Motivation

Some psychologists have described motivation as a trait or individual characteristic while others see motivation as a state, a temporary situation. Either way, there are two types of motivation orientations: intrinsic and extrinsic. Intrinsic motivation reflects a student's desire to engage in an activity because the activity itself is perceived as a reward. Students who are intrinsically motivated want to learn for the challenge of learning. They gain an internal reward of satisfaction. Students who need external incentives or pressures in order to achieve a certain behavior or task are extrinsically motivated (Woolfolk, 1998). In the classroom, extrinsic motivation includes the instructor's use of reinforcements such as extra credit, grades, and praise. Both, intrinsic and extrinsic motivation orientations are valuable in the education setting. The combination of these motivational strategies challenges students to produce their best work academically and provides students balanced opportunities to succeed.

Educational Theory

Before designing an online information literacy course, one should consider Moore's theory of transactional distance. According to Moore (1993), "The transaction that we call distance education occurs between teachers and learners in an environment having the special characteristic of separation of teachers from learners. This separation leads to special patterns of learner and teacher behaviors" (p.22). Transactional distance, "is a psychological and communications space to be crossed, a space of potential misunderstanding between the inputs of instructor and those of the learner" (Moore, 1993, p. 22).

There are three types of variables in the theory of transactional distance that affect online teaching and learning: dialog, structure, and learner autonomy. Dialog, also referred to as learner-instructor interaction, are productive and positive transactions in which student understanding is improved. Structure, also known as learner-content interaction, is "the method or medium by which students obtain intellectual information from the material" (Chen, 2001, p. 460). Learner autonomy is "the extent to which in the teaching/learning relationship it is the learner rather than the teacher who determines the goals, the learning experiences, and the evaluation decisions" (Moore, 1993, p. 31).

It is important for instructors to realize that the variables Moore describes affect the motivation of online students. The components of an online information literacy course should provide a well structured environment so that the learner can experience successful learner-instructor and learner-content interactions and exercise autonomous learning. A well designed class should reduce any feelings of isolation and motivate students to effectively learn through multiple modes of communication. Research has shown that the motivational quality of instruction has a direct correlation on the motivational outcomes of students (Small, 1998). Therefore, instructors need to include several motivational techniques and

strategies within the course design and content in order to meet the learning characteristics of multiple types of students.

Motivation Model

One approach to improving the quality of online instruction is the ARCS model of motivational design. The ARCS model, developed by John M. Keller (1983), identifies four essential dimensions of motivating instruction:

- **Attention** – Capture student interest and use strategies for arousing and sustaining an attitude of inquiry;
- **Relevance** – Make the instruction relevant to important needs, interests, and motives;
- **Confidence** – Build in learners an expectation for successful achievement of a learning task; and
- **Satisfaction** – Establish extrinsic and intrinsic reinforcement

The ARCS model provides a flexible framework to incorporate various motivating tactics into instruction. Keller (1999) emphasizes that within the physical classroom the instructor can evaluate and modify motivational effects, but online instruction is different because everyone is provided the same program. For this reason, online instructors should “identify key motivational characteristics in the learners, in the content area to be taught, and in the hardware or software to be used” (Keller, 1999, p. 40).

Instructional Design

Before the course begins the instructor needs to decide if all class materials will be available at the beginning of the course or displayed day by day as the course progresses. Instructors should maintain consistent due dates and times for assignments. Create a structured schedule for the course by adding a detailed calendar of dates onto the syllabus. Clearly state when new materials are available for reading, when assignments are due, and when quizzes and tests are due. A structured schedule helps motivate students by providing a tool for self regulation. A schedule will also help students discern what is to be expected of them within the entirety of the course.

The visual design of the course affects motivation. Whether, the course is developed as a series of web pages or with course management software, consistency is imperative. The visual design and organization should be consistent in the location of lecture notes, assignments, quizzes, and other course materials as not to confuse students. According to Jacobson and Xu (2004), “Motivation will plummet if students do not know where to look for the materials you send” (p. 130). Students should be able to easily navigate throughout all information and materials. Provide visual aids to assist in the

learning process. However, do not overload content with distracting graphics, but keep things clean and simple. Choose an appealing font style and color that is easy on the eyes. Finally, make adaptations to the layout of the course so that the majority of information on each “page” falls within the visual limitations of the computer screen.

Lecture notes and supplemental materials for the course need to be interesting and easy to read. Use a vocabulary geared to the understanding of a first-year college student; not too advanced and filled with library jargon and not too simplistic. Discuss topics reasonable to the students and make connections to prior knowledge or concepts. Choose events and ideas that pique interests and provide a desire to learn more. In online courses, relevancy of the material is particularly important to student retention, so demonstrating to students the relevance of information literacy instruction is especially important (Jacobson & Xu, 2004).

The content of the materials needs to reflect the desired learning objectives of the course. Online notes and materials need to be clearly written. Have a colleague proof read for understanding. The following questions can guide content development. Does the written lecture reflect the specific goals for that lesson and/or assignment? Will students understand the material the way it is currently presented? Is there too much information presented at once? Additionally, proof read lecture notes for grammatical and typographical errors.

Provide students with active learning or problem-based learning exercises. Students learn information literacy skills more effectively if they are engaged in a task that requires hands-on learning. Active learning methods also ranked high among all four dimensions of the ARCS motivational model (Jacobson & Xu, 2004). In order to increase learner autonomy and motivation, create assignments where the students can select from a pre-determined set of topics. Another idea is to create a mix of information literacy case studies and allow the students to choose which one to turn in for a grade. Problem-based learning activities, such as case studies, provide students real-world problems that have multiple solutions. These types of activities encourage students to use multiple skill sets. Sage and Torp report that “problem-based learning has been found to be a powerful way to motivate students, to increase critical thinking and problem-solving skills, and to help students to understand content” (as cited in Jacobson & Xu, 2004, p. 136).

Online instructors need to communicate regularly with students to provide assistance, feedback, and praise. Scripted and unscripted communication from the instructor to individual students is an effective way to increase motivation. Communication from the instructor should be constructive and provide the student with direction and guidance. Students become more motivated when they feel that the instructor truly wants to help them become better learners (Dewald, 2000). A good practice would be for instructors to initiate

correspondence with their students at the beginning of the semester. Create a policy that student e-mails will receive a response in a twenty-four hour time period. Also, use an e-mail account separate from an office e-mail account in order to organize communication. In a study done by Bellon and Oates (2002), they found that “e-mails from the instructor were consistently described as providing the highest level of motivation” (p. 11).

Instructors need to be accessible for students by keeping scheduled office hours in order to answer telephone calls or accept drop-in visits. Another possibility is to create an online office atmosphere through instant messaging or a virtual chat service. An online office gives students the opportunity to receive immediate feedback and responses to questions or problems. Instructors that are regularly available have more opportunities to increase the confidence and satisfaction of students and decrease transactional distance.

Instructors can also develop asynchronous discussions with the students to encourage learner-learner interaction and learner-instructor interaction. Students are motivated when they can create, share, and build upon knowledge and ideas in dialogue with their peers. Asynchronous discussions can occur through such mediums as a discussion board, a listserv, or a weblog. Discussions can be threaded or hyperlinked so that students can follow the flow of the conversations.

Online learners need the opportunities to engage in interactions that allow for self assessment, peer assessment, and informal assessment from the instructor. An example of such an opportunity is to have students submit an assignment to a discussion board in order for their peers to critique. Another idea is to appoint a student or a group of students as the weekly moderator of the discussions with the responsibility of encouraging everyone to keep interactions focused to the specific topic on hand. These types of informal assessment activities motivate students by allowing students to gauge personal performance through the feedback they receive.

Conclusion

Web-based technologies and online learning environments are becoming more common in higher education. Library instruction can build upon these trends by adapting instructional methods and motivational techniques to meet the needs of learners in the twenty-first century. Designing a successful credit-based online information literacy course requires a basic knowledge of learning factors that influence student motivation. Visual design, content, and communication play vital roles in the development of an online class. Understanding the various components of the theory of transactional distance allows for instructors to identify elements in the online environment that affect motivation. Combined with knowledge of Keller’s ARCS model of motivational design, librarians are able to enhance online instruction with multiple approaches for motivating students. In the future, more academic institutions will be providing information literacy

instruction in the online environment. Therefore, instructional design must focus on motivational strategies for online learners.

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