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25

Designing Curricula to Ensure Student Completions

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Introduction

"Course design is a series of decisions regarding objectives and the most effective methods of ensuring that students accomplish the objectives" (Cavanaugh 171).

Curriculum: the educational blueprint for our institutions. Without curriculum, our institutions wouldn't exist. Our curriculum is our product; it provides the concepts, skills, and motivation that our students need to shape their futures. From book-driven curriculum to the highest, technologically driven curriculum, an institution's main goal is to ensure that students accomplish the objectives and graduate from our institution. Students' completion of our curricula is the ultimate measure of institutional success—not only do we send successful, skilled graduates into the workplace, but student completion affects the bottom line in a positive way.

While no magic solution exists to ensure student completions, instructional designers can incorporate some tried-and-true strategies that will entice, encourage, and ultimately, provide students with the skills they need to move forward in their education and careers.

Aim for the Bull's Eye: Gear Curricula to a Target Audience

Who is our target audience? For whom do we design our curricula? The first step toward designing curricula to ensure student completion is to identify—and design for—our particular student base.

As a former college English teacher, it is part of my essential being to identify my target audience *before* I write. Even as I write this document, I constantly envision the target audience in my mind. Of course,

not all readers will be in that "bull's eye zone;" however, many will, and I strive to aim for that group.

Think about it. Course materials for a graduate-level biology course should be designed with different strategies than those of an associate-level biology course. The biology graduate student has already mastered the foundational information that enables her to relate—and make practical associations—to the upper-level curriculum. Instructional designers must gear the upper-level curriculum for this particulars student's needs and expectations. In contrast, an associate-degree student may not have encountered biology for many years, if at all. Obviously, the subject matter in this course will be on an introductory level, but also, the entire course should be designed with this student's needs in mind. The associate degree student only needs this one biology course. And this biology course is an element in a well-rounded education. It is up to the instructional designer to ensure the course objectives are geared for the needs of an associate-level, career-driven student, and students can relate the content in a practical way. Not only are the content and design going to differ substantially between a graduate- and associate-level biology course, but we must consider the readability factor as well.

Finch and Crunkilton, experts in vocational and technical curriculum development, state that "consideration must be given to the grade level(s) of the group(s) who will be using the materials" (229). When we identify the average grade level of our target audience, we can determine the readability level at which we should develop our materials, as well as identify the "depth to which the technical information will be covered" (Finch and Crunkilton 229).

Strategy: Create a comprehensive audience profile based on thorough market and industry research. The profile helps instructional designers

focus on that audience's needs and expectations throughout all aspects of curriculum development. Throughout the curriculum development process, relate to the target audience and ensure the course material is relevant to these students' lives and to their ultimate educational and/or career goals.

Once the audience profile is determined, ask these questions to help strategize the use of the profile:

- How can I adapt the curriculum for the target audience's attention span or expected chunks of study time?
- How can I ensure that the material will enlighten the learner about the specific objectives of the career or course?
- How do I keep students interested and hungering for more?
- How do I help students practically apply new concepts?
- What techniques will help calm the often anxious student who typically juggles study, work, social and family demands?

Without a target audience in place, we shoot our curricula out the door without a bull's eye in sight. Without a target audience, it's hit or miss as to whether we effectively reach—and retain—our student base.

As basic as it sounds, instructional designers should design curricula with our target audience's needs, expectations and goals in mind. Doing so increases the likelihood of student completions…simply because our students can better relate to the curricula.

Look Past the Forest to Find the Trees: Identify and Teach Specific Competencies

It's easy to focus on the big picture—the forest—when developing distance learning curricula. One key to effective curricula, however, is to identify the required course or program competencies—the critical tasks necessary to perform in an occupation or complete a course.

With a clear vision of the target audience, instructional designers must *teach the actual skills and knowledge* this audience needs in order to stay motivated to complete the program. Students in any kind of educational program share the main goal of mastering (or at a minimum, excelling in) specific competencies. It is the instructional designer's job to ensure that students are provided what they need to meet that goal. How do we do that effectively?

Strategy: Teach what needs to be taught. Avoid busy work and irrelevant content. Stick to the goal of helping students master specific competencies. Frequently remind students of the big picture—their goal for completing the program; illustrate *why* each competency is important, how it will help them in their future careers or coursework. Consistently reinforce how material relates/applies to other material they've learned.

Students enroll in our institutions with a particular goal in mind—whether to move on to another course or to begin a new career. However, they can lose sight of this big picture if we deviate from the specific competencies students need to successfully complete their coursework. Instructional designers can help ensure student completions by structuring curricula to specific competencies, as well as reminding students how these competencies relate to students' "big picture goals."

Take It One Step at a Time

At some point in your life, you've probably watched a baby learn to walk. This process consists of two competencies: standing and walking. First, the baby wobbles to a standing position, hovers there for a couple of seconds, and then plummets a couple of inches to land on his bottom. The baby works on this competency for a bit. Once he has mastered it and can stand for a few seconds, the baby initiates the next competency—taking a tentative step. Of course, he falls. However, given a little time and practice, the baby is well on his way to running! The baby must first master standing before moving on to the main competency: walking.

As we know, the human body's physical milestones often occur in a step-by-step process. Similarly, our cognitive abilities seem to develop in steps. Humans learn best with a step approach to many things—including learning new concepts.

Strategy: Instructional designers must ensure that students have the appropriate foundation on which to build new concepts. Take writing, for instance. Before a student can write an essay, the student must have mastered the various steps that involve writing that essay. For instance, the student must learn to identify main ideas, construct complete sentences and create complete paragraphs, one step at a time. Once each step is mastered, it becomes much easier to tackle a project that requires all of these steps.

While the step-by-step approach may seem obvious, in the haste to produce curriculum, this basic element can easily fall to the wayside. I have worked with many brilliant content experts who effectively identify what needs to be taught. However, without effective instructional design strategies, that expert may not grasp the level of the target

audience. For instance, an experienced accountant may find it difficult to recall, and explain, the basic accounting concepts that the target audience needs to master prior to completing a balance sheet. This is where instructional designers come in. Designers continually assess the audience's educational foundation before introducing new, more complicated concepts in a step-by-step manner.

Not only does this strategy make sense, but it allows students to encounter success in steps and feel confident in their student role. Once students feel they've achieved success, they exhibit increased confidence, which allows them to tackle increasingly difficult concepts and applications. And, of course, this leads to student retention!

Engage Students: Relate to Various Learning Styles

As we all know, distance education curriculum presents challenges to the instructional designer. Instructional designers jump through hurdles we cannot *see*. We cannot read facial and body language to know if a student is confused. We often cannot determine what kind of learner the student is—does he perform best as a visual, auditory, or kinesthetic learner? At a distance, it's more challenging to engage the student in hands-on, kinesthetic activities. Yet, research has shown that *learning by doing* or "experiential learning" (Bersin 33) is among the most effective learning strategies. How do we effectively engage students at a distance? How do we successfully teach distance learning content to a variety of types of learners?

Strategy: Fortunately for distance learning instructional designers, visual learners—consisting of 50 to 70 percent of the population (Bersin 32)—are among the easiest to whom to relate. The written word, graphics, charts and PowerPoint® slides are all visual learning elements that are often inherent in curriculum design. For web-based curricula,

the visual learning mode is easily integrated. Designers can incorporate web-based video clips or video simulations/practicums to successfully blend the visual and the kinesthetic needs of learners. Video simulations provide learners with the opportunity to "see" a concept in action; video practicums require learners to "do"—apply and synthesize concepts—providing hands-on opportunities to practice higher-order thinking. Naturally, higher-order thinking leads learners to mastery and retention of concepts.

Auditory learners, those who learn best by hearing information, consist of about "20 to 40 percent of the population" (Bersin 32). These learners provide a bit of a challenge to distance learning instructional designers. Again, web-based curriculum provides opportunities for designers to include mini-lectures or explanations that prove valuable to our auditory learners. Additional auditory strategies I have found successful include:

- Encourage students to talk to people working in their future career to gather real-world information.
- Provide CDs or audiotapes to help students master content that lends itself best learned via auditory mode.

Kinesthetic learners consist of only five to 20 percent of the population (Bersin 33). However, as educators, we are well aware that learners retain information best when they *experience* a concept. For instance, a teenager learning to clean out his closet (effectively!) may need to actually *experience* this concept to do it correctly. Parents can *show* (visual instruction) the teen how to dismantle the mountain of junk on the floor…but then the parent is the one who experiences the concept. Of course, the parent can *tell* the teen how to clean out the closet, as well. However, if we want the teen to really experience effective closet-cleaning techniques, the teen really must *apply* the cleaning concepts to

her own experience. With this form of kinesthetic learning, we can bet that the teen will best comprehend and retain the instruction. (She may not prefer this learning strategy, however.)

Instructional designers may find it challenging to help learners *experience* concepts via distance learning—especially if the designer takes brick-and-mortar curriculum and adapts it to distance learning. In a brick-and-mortar situation, designers often rely on instructors to address students' learning styles—and rightly so. However, distance learning curriculum design requires creative thinking—backed with sound research—in order to address learning styles. Designers can incorporate real-world simulations and practicums that require students to *experience* concepts. Research has proven that *teaching others* is, by far, the best learning strategy. Designers can integrate online group work or projects that require learners to teach others about a concept. For instance, "reorganizing information in order to teach others" (Polichar and Bagwell 96) is a strategy that requires sophisticated, higher-level thinking that results in enhanced learning and retention of concepts.

Distance learning students benefit best from a successful blend of various learning strategies. When students retain and apply instructional concepts, they are more likely to remain engaged in the curriculum. Engaged students are happy, successful students. Happy, successful students lead to students who complete our programs!

Student-centered Interaction

One of the most important elements in distance learning curricula includes interaction. "Communication is the foundation of successful distance learning courses" (Johnson 113). Of course, we can communicate via paper or the computer monitor, but *effective* communication involves interaction.

As distance education moves into the technological era, we find more opportunities to incorporate continuous interaction within curricula. Interaction promotes learning and retention of concepts. I distinctly remember several college classes that consisted of a “sage on the stage” who relayed his opinion to the class—definitely not a students-centered learning environment. We ground our pens to the notebook to catch every last phrase from the “sage.” Then I went home, studied, regurgitated my notes onto a test paper, and that was that. Unfortunately, the concepts presented in those classes never made their way into my long-term memory. Instead, this lecture-regurgitation style of teaching and learning only empowered the lowest cognitive abilities of my brain.

Later, I was fortunate enough to take college classes that required heavy interaction among the class. The professor encouraged questions and comments, and the class happily obliged. We consistently discussed, applied, analyzed, synthesized and evaluated information among each other. This student-centered facilitation philosophy, coupled with the resulting higher-order thinking, resulted in long-term memory of the concepts. To this day, I vividly remember many specific concepts from those classes. Student-centered interaction was the key to concept retention.

Strategy: While instructors provide the ongoing interaction opportunities, instructional designers need to incorporate interactive activities into the curriculum. Successful interactive activities move away from monologue-based interaction to dialogue-based discussions that may include chat rooms, discussion groups, and group activities, such as peer review, collaborative projects and such. For correspondence courses, dialogue-based interaction can occur via feedback on assignments, e-mail or by phone.

Distance learning courses must continually stress the importance of asking questions. Students must feel comfortable questioning concepts and communicating lack of understanding or ability to practically apply concepts. Instructional designers and instructors have the responsibility to ensure that students are aware of their own responsibility to ask for clarification.

Students who are involved with the course, their peers and their instructors, feel a sense of community, a community where their thoughts and questions matter. A sense of community helps students feel valued and increases the likelihood that students will complete their programs.

Connect the Dots: Draw Real-World Connections

Over the years, I have honed what—in my opinion—is probably the most effective instructional design strategy. We want our students to complete a program of study; however, if students cannot see or experience the correlation between a concept and their lives or future careers, we might as well sign their program withdrawal papers. Instructional designers need to consistently illustrate—and answer—"what's the point?" Let's take a look at an everyday example.

We know the basics of good health: good nutrition, exercise, maintaining a moderate weight. However, what does the "average Joe" really know about the intricacies of the human body? Most likely, just the basics. Sure, Joe reads the newspaper and follows the news, so he's somewhat familiar with common diseases and ailments. He's heard of high cholesterol and knows that a diet that consists of fast food can contribute to high cholesterol. At this point, high cholesterol has not applied to Joe's life—why should he bother with the details?

When Joe's physician diagnoses him with high cholesterol, suddenly, all those details really matter to Joe—what he eats, how much he exercises, the effects of high cholesterol on the human body, especially on his cardiovascular system. His brain immediately attempts to create an association with those abstract anatomical concepts. Now these concepts apply to his life in a very real way. Joe has, unfortunately, discovered the real-world connection to certain anatomy concepts. Before he discovered this connection, the high cholesterol concept and the related anatomical concepts, did not factor into Joe's life. Without a reason to apply these concepts, Joe did not retain the information.

Strategy: Instructional designers should provide, whenever possible, real-world examples of concepts. Designers can incorporate creative ways to help students retain material, such as provide real-world examples and apply theories not only to the workplace, but to the student's personal life, as well. Elaborative encoding is a proven strategy that enables learners to associate concepts to situations that are important to them. Teach concepts in context. Or at a minimum, present concepts in a way that encourages learners to apply those concepts to their own lives.

Students need to experience the real-world connection between new concepts (such as anatomy) and how these concepts apply to their lives or future careers. For instance, a foundation in medical terminology is a critical aspect of a medical transcriptionist's job. Of course, the transcriptionist student must learn medical terminology *before* she transcribes physician dictation. Without the medical terminology background, the student may find it virtually impossible to discern certain terms dictated by the physician. But how do we present the abstract concepts of medical terminology in a way that learners will experience the real-world connection?

Teach medical terms in context. For instance, illustrate how students will encounter that terminology in future coursework or the career, such as in medical reports. A student who simply memorizes the meaning of a term such as lobotomy is not nearly as likely to retain that information as if she experiences that concept in an excerpt of a medical report or scenario. The medical report will, undoubtedly, illustrate not only the details surrounding a lobotomy, but will also provide a glimpse of the patient who receives the lobotomy.

A very basic—and effective—strategy in distance-learning curriculum development is to *show versus tell*. Descriptive writing can help students envision themselves in a vignette or scenario that illustrates and practically applies a concept. For instance, to introduce the career opportunities of a medical coder, present that scenario from a second person point of view. Paint a picture with words that *shows* the student the new and exciting tasks that await her in her new career. Place the student in a main character role in the scenario. It's much more engaging and relevant to envision oneself in a situation rather than simply read about someone else in that situation.

Real-world connections promote retention of information. When our students retain information, they feel—and *are*—more successful. Successful students look forward to continuing their education and applying concepts to the real-world.

Motivation: The Key to Student Success

People—our most valuable resource. Cathy Cavanaugh, a distance education expert at the University of North Florida, said it perfectly: "All education programs are built essentially on their people" (176). When we think about it, especially regarding distance learning educational programs, *the people*—instructional designers, faculty and

support staff—provide the product and service students need to attain their educational goals and complete our programs.

Let's face it. Competition is fierce. Consumers have many options when it comes to choosing an education. If we want them to choose us, we not only have to provide an outstanding product—the curriculum—but we must support that product with experienced, motivating customer service—faculty and support staff. If the consumer is not happy with the product or the service, he will find what he needs elsewhere.

Strategy: First and foremost, institutions must have qualified and trained instructional designers, faculty and student support staff. "For facility-free distance education programs, this fact is critical, making human resources a vital responsibility of the institution" (Cavanaugh 176).

Institutions must be responsible for ongoing training and resources for instructors. Instructors must not only be content experts, but they must be trained in effective communication skills in order to motivate students, facilitate learning to accommodate various learning styles, convey information to all types of learners, facilitate and make students feel valued. Once again, I've met (and studied under) professors who "knew their stuff." In fact, they knew their stuff so well they couldn't teach it effectively. These professors were qualified in their content areas, but could not convey information in a way that students could apply the real-world connections. A content expert must be trained to teach. Look past the qualifications of a potential instructor to ensure that person can effectively teach.

Our people are the lifeline between the student and the school. If that lifeline is severed, we lose a student. Instructional designers are the first step in securing our students to provide them with the confidence to

complete our programs. What can we do? Instructional designers must build positive reinforcers into the curriculum. Several tried-and-true strategies exist. Instructional designers can:

- Ensure rich, dynamic content, especially in distance learning, course material cannot be dry or boring.
- Incorporate motivational and affirming passages to encourage and enthuse students.
- Help students experience success without patronizing.
- Reiterate that instructors and school staff are available for help.

A little motivation goes a long way in distance education. Distance learners need to feel a sense of community; they need to know that they are not alone in their educational endeavors. Our institutions' people need to continuously provide that motivation; however, instructional designers provide an important link to our students. They can carefully design rich, dynamic curricula that keeps students motivated to complete their programs.

Conclusion

The strategies provided here might seem obvious; however, in our hectic, day-to-day tasks, we may lose sight of the crucial impact our instructional designers have on our educational business. Instructional designers can strategize curriculum development with these key techniques:

- Identify—and be familiar with—the target audience; gear curricula specifically to their needs and expectations.
- Teach specific, relevant competencies.

- Present material using a step-by-step approach.
- Engage all types of learners in a student-centered environment; present material using a variety of rich techniques for visual, auditory and kinesthetic learners.
- Provide opportunities for interaction—student–to-student and faculty-to-student.
- Present concepts using real-world connections that enable students to practically apply these concepts.
- Motivate, motivate, motivate!

The bottom line is we want our students to graduate and be successful. Dynamic, effective curriculum is an essential key to each student's success—and ultimately, the success of our institutions. Students who successfully complete our programs are walking advertisements for our institutions.

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About the Author

Trish Bowen is the Director of Education for Weston Distance Learning, Inc. (At-Home Professions, U.S. Career Institute and McKinley College) in Fort Collins, CO. Trish manages all facets of curriculum research and development for each of the company's divisions.

Trish has more than 13 years of teaching and instructional design experience. In addition to extensive online teaching experience, she has developed online curricula for various colleges and universities. In the early years of online course delivery, Trish trained faculty in online course development, facilitation and academic platforms.

Trish holds a Master of English Education from Auburn University, as well as several distance learning certifications from various institutions.

Trish has spoken on various topics, including "Tips for Curriculum Development" at the 2004 DETC Distance Education Workshop. She has also presented workshops on online course development, integrating technology into the classroom and portfolio use in the classroom.

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