

Experience Design

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ABSTRACT

It is essential to think about education online as comprehensively as possible. Experience design offers designers of online courses a comprehensive model informed by research and development in a number of areas that can provide a foundation for the effective design of online experiences that are functional and purposeful—and also engaging, compelling, memorable, and enjoyable. Experience design is an ancient practice, going back to the earliest human impulse to develop rituals, ceremonies, drama, and even architecture. But the design of experiences has become much more pervasive during the twentieth century. Media has played a central role, including radio, television, multimedia, and virtual reality. But experience design is also informed by new ideas in economics, especially Pine and Gilmore's notion of the emerging experience economy. And it draws upon ideas from artificial intelligence, the psychology of optimal experiences, sociology, and other areas, including electronic commerce, persuasive, human-computer interface design, drama, and digital storytelling. This article discusses key concepts and theories from all of these areas and explains how they can be adapted to the design of online learning experiences.

EXPERIENCE DESIGN

IT IS ESSENTIAL TO THINK ABOUT EDUCATION in the realm of cyberspace as comprehensively as possible. In addition to designing actual courses online, universities need to design effective interfaces for administrative interactions and transactions such as registering for courses and ordering textbooks as well as life-long learning experiences and online communities for alumni. It is essential for universities to think about the design of all the online experiences they offer to constituencies such as students, alumni, prospective students, and faculty and staff. Only with this kind of global design vision will it be possible to successfully extend the immense experience value that universities offer at their real world campuses

(“the college experience”) to their cyberspace campuses. Electronic commerce expert Seybold¹ emphasizes the importance of owning the customer's (or student's) total experience. This is the key—attention to design details at all levels within the context of the audience's experience of the content and design features contained within a web-based course or a university website overall. This goal of total ownership can only be achieved through an understanding and practice of experience design.

Experience design, a comprehensive model informed by research and development in a number of areas, can provide a foundation for the effective design of online experiences within the cyber campus of the university. The goal of experience design is to orchestrate experiences that are not only functional and pur-

poseful, but also engaging, compelling, memorable, and enjoyable.

Marshall McLuhan (1967) once observed that “when information is brushed against information, the results are startling and effective.” The emerging field of experience design is brushing together ideas from a wide array of disciplines with exciting results, including economics, electronic commerce, psychology, sociology, communications, artificial intelligence, and other specialty areas in computer science such as virtual reality and persuasive technologies, as well as theater and entertainment. Design, research, and theory-building in several diverse fields have found a common goal in the quest to design experiences that serve some purpose—commerce, education, entertainment—in a compelling and memorable way. Many well-tested design ideas from outside of education, from a wide range of fields and applications, offer great potential for the design of online classes and university campuses in cyberspace.

Experience design is really an ancient practice; rituals, ceremonies, drama, and even architecture (e.g., medieval cathedrals) are designed to provide certain kinds of experience. But the design of experiences has become much more pervasive during the twentieth century. Media has played a central role, first with the emergence of film and radio and, more recently, with electronic media such as multimedia, virtual reality, and the Internet. Different media showcase different types of experiences, but all share in the central importance of the experiences they evoke and, concomitantly, the importance of effective design.

One important theory underpinning experience design comes from economics. Pine and Gilmore³ theorize that we have moved from a service economy to an experience economy. According to these analysts, the experience component of the economy is growing rapidly, outstripping the service sector, just as the service economy outgrew the industrial economy previously. The pioneer in this transition to an experience economy is Walt Disney. Disneyland and Disney World as well as all the Disney movies embody this model of experiences whose economic value is based upon enjoy-

ment and memorability rather than our traditional concept of service. And Las Vegas is at the leading edge of the experience economy. Pine and Gilmore’s model highlights the importance of experience design and the need for effective design guidelines: Experiences are the basis for future economic growth within this new and rapidly expanding sector of the economy—a sector that includes education.

The contrast between service and experience is subtle but important. As Pine and Gilmore explain,

When a person buys a service, he purchases a set of intangible activities carried out on his behalf. But when he buys an experience, he pays to spend time enjoying a series of memorable events that a company stages—as in a theatrical play—to engage him in a personal way. (p. 2)

In this context, experience-type transactions occur whenever a company intentionally uses services as the stage and goods as props to engage an individual. Pine and Gilmore point out that buyers of experiences value being engaged by what the company reveals over a duration of time. People have cut back on goods to spend more money on services, and now they are making way for more memorable—and more highly valued—experiences.

Table 1 presents Pine and Gilmore’s model of the distinctions between agrarian, industrial, service, and experience-based economic patterns. Note the shift in economic function between services and experiences, from *delivery* to *staging*. Educators will need to shift their thinking from the notion of *delivering instruction* to *staging educational experiences*. And they need to shift from playing the role of *provider* to the role of *stager*. Universities already play this role in hosting cultural and sports events, but they need to be aware of this and they need to extend this role into the educational sphere, without a loss of quality. But it’s important to note that this model of experience design offers the potential for high quality education experiences that build upon research by Mihalyi Csikszentmihalyi, Roger Shank, Howard Gardner, and others, as we shall see later in this paper.

TABLE 1. ECONOMIC DISTINCTIONS BETWEEN AGRARIAN, INDUSTRIAL, SERVICE, AND EXPERIENCE-BASED ECONOMIC ACTIVITIES

<i>Economic offering</i>	<i>Commodities</i>	<i>Goods</i>	<i>Services</i>	<i>Experiences</i>
Economy	Agrarian	Industrial	Service	Experience
Economic function	Extract	Make	Deliver	Stage
Nature of offering	Fungible	Tangible	Intangible	Memorable
Key attribute	Natural	Standardized	Customized	Personal
Method of supply	Stored in bulk	Inventoried after production	Delivered on demand	Revealed over a duration
Seller	Trader	Manufacturer	Provider	Stager
Buyer	Market	User	Client	Guest
Factors of demand	Characteristics	Features	Benefits	Sensations

Note: Adapted from Pine and Gilmore.³

TYPES OF EXPERIENCE

It is important to note that Pine and Gilmore’s model of experience encompasses multiple “realms” or types of experiences that can be engaged, including (1) entertainment, (2) educational, (3) esthetic, and (4) escapist. Figure 1 shows the different realms of experience in this model. As this model shows, experiences can be delineated along different dimensions.

As Figure 1 indicates, an experience may engage participants on multiple dimensions, including (1) type of participation (active or passive) and (2) type of connection or environmental relationship, either external to it, an observer, or internal to it (a player). In terms of participation, this can range along a spectrum from passive participation, where customers do not directly affect or influence the performance but experience the event passively, as pure observers or listeners, to active participation at the other end of the spectrum, in which customers personally affect the performance or event that yields the experience. Active participants could include skiers participating in a race while passive participants are those who observe the race. In terms of one’s connection to the experience, this can range from being external to an event but absorbed in it, such as listening to a concert or watching a parade, or internal to an event, either physically or virtually, such as an immersive video game or virtual world.

Pine and Gilmore explain that the coupling of these two dimensions—mode of participa-

tion and type of connection (internal or external)—defines the four realms of an experience—entertainment, education, escape, and aestheticism. These are four mutually compatible domains that often intermingle to form uniquely personal experiences. When people think of experiences that are entertaining, they usually think first of experiences where they passively absorb the experiences through their senses, such as when viewing a performance, listening to music, or reading for pleasure. But in fact, the experiences that these analysts include in their model extend much further.

Significantly, Pine and Gilmore emphasize that in setting out to design a rich, compelling, and engaging experience, it is not necessary to stay in just one realm or quadrant. “The richest experiences encompass aspects of all four realms. These center around the ‘sweet spot’ in the middle of the framework” (p. 40). While many experiences engage primarily through

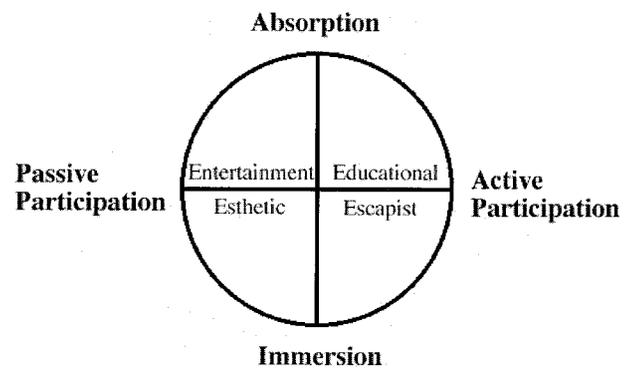


FIG. 1. The experience realms. Adapted from Pine and Gilmore³.

one of the four realms, most experiences in fact cross boundaries, combining elements from all four realms: the key is to find the best balance for each type of experience. Pine and Gilmore recommend using the experiential framework as a guide to help you creatively explore the aspects of each realm that might enhance the particular experience you wish to stage. When designing an experience, they recommend taking into consideration certain questions.

- What can be done to improve the *esthetics* of the experience? The esthetics are what make your guests want to come in, sit down, and hang out. Think about what you can do to make the environment more inviting, interesting, or comfortable. You want to create an atmosphere in which your guests feel free “to be.”
- Once there, what should your guests do? The escapist aspect of an experience draws your guests further, immersing them in activities. Focus on what you should encourage guests “to do” if they are to become active participants in the experience.
- The educational aspect of an experience, like the escapist, is essentially active. Learning, as it is now largely understood, requires the full participation of the learner. What do you want your guests “to learn” from the experience? What information or activities will help to engage them in the exploration of knowledge and skills?
- Entertainment, like esthetics, is a passive aspect of an experience. When your guests are entertained, they’re not really doing anything but responding to (enjoying, laughing at) the experience. Professional speakers lace their speeches with jokes to hold the attention of their audience, to get them to listen to the ideas. What can you do by way of entertainment to get your guests “to stay”? How can you make the experience more fun and more enjoyable?

Pine and Gilmore explain that the sweet spot for any compelling experience is ultimately a tool that aids in the creation of memories, a place distinct from the normally uneventful world of goods and services. “Its very design

invites you to enter, and to return again and again. Its space is layered with amenities—props—that correspond with how the space is used and rid of any features that do not follow this function.” Experience design is about creating this sweet spot for a particular goal and context—putting in place design features that support its purpose and eliminating or re-designing features that detract from its purpose.

One important design consideration in the creation of experiences is theming.³ An effective theme must be concise, compelling, uncluttered with excess detail. Theming can mean identifying an organizing principle for an experience. It can mean scripting a unified story to frame an experience that would seem incomplete without the guests’ participation. Theming also refers to the creation of cohesive design elements that lend support to a theme, an experience that wholly captivates the customer.

Pine and Gilmore see a link between their model and Csikszentmihalyi’s^{4,5} concept of flow, but only in the context of the escapist realm, which involves a combination of active participation and immersion. I would suggest that their assessment of how Csikszentmihalyi’s concept of flow fits with experience design is too narrow and, indeed, Csikszentmihalyi identified the presence of the flow experience across many, many diverse contexts. Murray,⁶ Kim,⁷ and others point out that in the context of highly structured multi-user online games and virtual environments, participants always push the limits of the system to enhance their sense of challenge and engagement—very much in keeping with Csikszentmihalyi’s concept of flow. And people sometimes approach searching for information on the World Wide Web with this kind of absorption. Social interactions in cyberspace, including discussion forums and chat rooms linked to online classes, tend to be highly participatory and immersive.

Csikszentmihalyi⁴ explains,

The autotelic experience, or flow, lifts the course of life to a different level. Alienation gives way to involvement, enjoyment replaces boredom, helplessness turns into a feeling of control, and psychic energy works to reinforce

the sense of self, instead of being lost in the service of external goals. (p. 69)

Csikszentmihalyi has found that an optimum state of flow or “autotelic experience” is engaged when there is a clear set of goals requiring an appropriate response; when feedback is immediate; and when a person’s skills are fully involved in overcoming a challenge that’s high but manageable. When these three conditions are met, attention to task becomes ordered and fully engaged. A key element of an optimal experience is that it is an end in itself. Even if undertaken for other reasons, the activity that engages us becomes intrinsically rewarding. It is this aspect of flow that seems most similar to Pine and Gilmore’s concept of experience and, indeed, in this respect, Csikszentmihalyi’s framework helps us to understand why the creation of memorable, engaging experiences can be such a valuable enterprise.

There is support for Pine and Gilmore’s model from a diverse array of analysts. Wolf,⁸ a media industry strategist, argues that all businesses (even banks and supermarkets) will increasingly need to be entertaining to thrive. According to Wolf, business is becoming synonymous with entertainment—a trend that is exploding because of the Internet. Commercial websites must feature compelling “entertainment content” to win customers. Although no substitute for quality, this entertainment dimension is critical in establishing brand and attracting consumers. The entertainment dimension offers added value. This is something universities should keep in mind as competition increases for educational programs in cyberspace.

Murray⁶ points out that movie rides, simulator rides that build upon movies such as *Back to the Future* or *Aladdin*,

are providing evidence that audiences are not satisfied by intense sensation alone. Once people do go “into” the movie, they want more than a roller-coaster ride; they want a story. Developers have lately been expanding the duration of the rides and are adding more characters and incidents to them to meet the rider’s expectation of dramatic action. Most ambitiously, they are giving the rider more freedom to direct the ride and more opportu-

nity to affect the unfolding story. The model is changing from one in which a rider is swept along in an exciting action to one in which a “guest” is paying a visit to an enticing place. (p. 50)

Technology in the form of sophisticated, dynamic computer graphics makes this kind of innovation possible but interactive media of all kinds offer potential for guests to explore enticing places and engage in compelling challenges, including cognitive and imaginative challenges.

Rolf Jensen,⁹ a Danish futurist, has articulated a model similar to the experience economy that he refers to as “the Dream Society.” In the emerging Dream Society, the quality of the experience, including the story or theme that underlies it and provides a memorable dimension, is becoming increasingly important in all sectors of our lives. According to Jensen, the Dream Society will center around six major markets that target human needs for adventure, togetherness, to care and be cared for, to define ourselves, to feel safe and secure, and to demonstrate our convictions.

Related to this, storyteller Dana Atchley, who has adapted his storytelling to digital media, advises companies such as Coca Cola and PricewaterhouseCoopers concerning how they can harvest and share stories in order to build a sense of participation and engagement for employees as well as generating valuable information for external marketing.^{10,11} These companies see the value of stories as a tool for marketing, motivation, and communication. Knapp,¹² the chief information officer at PricewaterhouseCoopers, reports that this company is using Atchley’s strategy of story gathering and sharing via digital media as a way to make the transition from two companies to one merged company. The goal is to create a unified corporate story from two previously separate corporate cultures and traditions to enhance cohesion and commitment.

STORIES AS DESIGN STRUCTURES

Many analysts see the importance of stories as a central element in designing experiences.

Electronic commerce expert Seybold¹ comments,

What I've found is that concepts and how-tos really only take root when they're embodied in a story. As human beings, we tend to learn best by example. And it's easier to remember and extrapolate from the stories we're told and can retell to others. (p. xix)

Similar to this, researchers at Xerox Palo Alto Research Center¹³ suggest that stories provide a memorable, compelling format for transferring information and discoveries—for example, successful strategies for solving problems. Through story sharing, workers can “bootstrap” on each other's experience rather than reinventing the wheel each time they approach a problem. Stories are a form of “expert system” for remembering and integrating what we learn. There is a great deal of evidence to support the importance of stories as a way of packaging information in order to optimize communication and learning.

Artificial intelligence expert Roger Schank^{14,15} theorizes that thinking depends very much upon storytelling and story understanding. Schank speculates that human beings “are naturally predisposed to hear, remember, and to tell stories. The problem—for teachers, parents, government leaders, friends, and computers—is to have more interesting stories to tell.” Schank has focused extensively on the development of sophisticated training programs centered upon stories.

Similar to this, cognitive psychologist Howard Gardner¹⁶ theorizes that stories are central to human cognition. In particular, Gardner has focused upon the role stories play in leadership.

In speaking of stories, I want to call attention to the fact that leaders present a *dynamic* perspective to their followers: not just a headline or a snapshot, but a drama that unfolds over time, in which they—leaders and followers—are the principal characters or heroes. (p. 14)

One form of storytelling is drama. An important theorist concerning experience design is actress, researcher, and software developer

Brenda Laurel, whose work is grounded in the theater as well as the design of virtual environments and interactive games. Laurel¹⁷ explains that,

The key word in finding an illuminating path through the technological maze is “interaction.” These new technologies all have one thing in common: they can aid our interaction with others, with knowledge, information, and experience, and even with the devices themselves. When we look toward what is known about the nature of interaction, why not turn to those who manage it best—to those from the world of drama, of the stage, of the theatre?

A passage from Canadian writer Robertson Davies¹⁸ illustrates this concept of how theater can provide a useful source of inspiration for experience design:

Darcourt knew how the effect was achieved. He had attended most of the rehearsals and heard many of the arguments during which the notable scene had been planned. Nevertheless, he was caught in its magic and he understood what he had not known before, that much of the magic of a great theatrical moment is created by the audience itself, a magic impalpable but vividly present, and that what begins as trickery of lights and paint is enlarged and made fine by the response of the beholders. There are no great performances without great audiences, and this is the barrier that film and television, by their utmost efforts, cannot cross, for there can be no interaction between what is done, and those to whom it is done. Great theatre, great music-drama, is created again and again on both sides of the footlights. (p. 220)

Interactive media can also achieve this kind of interaction, including, ideally, the kind of magic that Davies describes, through effective experience design—design that permits the audience to play its responsive role optimally.

Drawing upon drama, Laurel¹⁷ identifies the following elements of experience design:

- Dramatic storytelling: Storytelling designed to enable significant and arresting kinds of actions).

- **Enactment:** To act out, for example, playing a game or learning a scenario as performance.
- **Intensification:** Selecting, arranging, and representing events to intensify emotion.
- **Compression:** Eliminating irrelevant factors, economical design.
- **Unity of action:** Strong central action with separate incidents linked to that action, clear causal connections between events.
- **Closure:** Providing an ending point that is satisfying both cognitively and emotionally so some catharsis occurs. Examples of this include providing an opportunity to land the plane after a flight simulator session and providing an ending to a scene or a story.
- **Magnitude:** Limiting the duration of an action to promote aesthetic and cognitive satisfaction.
- **Willing suspension of disbelief:** In other words, cognitive and emotional engagement with the premise of the experience. Engagement is only possible when we can rely on the experience such as a game system or a virtual world to maintain the representational context.

Laurel points out that from the point of view of theater, “People who are participating in the representation aren’t audience members anymore. It’s not that the audience joins the actors on stage; it’s that they *become* actors—and the notion of “passive” observers disappears” (p. 17). Designers of instruction should keep in

mind the importance of defining the “whole” activity as something that can provide satisfaction and closure when it is achieved. There are clear parallels between Laurel’s model and Pine and Gilmore’s model, as indicated in Table 2. And Laurel’s model adds to our understanding of the Pine and Gilmore model; for example, by articulating design considerations such as intensification, compression, magnitude, and closure.

PERSUASIVE TECHNOLOGIES

Perusasive technology is an emerging area in computer science that has taken up this dramatic metaphor. Persuasive technologies clearly exemplify Pine and Gilmore’s model of the experience economy; persuasive technologies offer different strategies for arriving at the sweet spot for a particular application. Fogg¹⁹ explains that computers can indeed persuade and, like the human persuaders in our lives, persuasive computing technologies can bring about constructive changes in many domains. There are at least 12 domains for which persuasive technologies have significant potential, including education, self-help, health, safety, and environmental conservation. Persuasive technology focuses on the *planned* persuasive effects of computer technologies. According to Fogg,¹⁹

a persuasive computing technology is a computing system, device, or application inten-

TABLE 2. COMPARISON OF PINE AND GILMORE’S EXPERIENCE ECONOMY MODEL WITH LAUREL’S DRAMATIC INTERACTION MODEL

<i>Pine and Gilmore’s³ model</i>	<i>Brenda Laurel’s¹⁷ model</i>
Experience	Interactive drama
Entertainment	Dramatic storytelling
Escapist	Willing suspension of disbelief
Esthetic	Intensification, Compression, Magnitude, Closure
Educational	Active participation
Stage	Enact
Memorable	Dramatic
Personal	Interactive, cognitive and emotional engagement, personally challenging
Revealed over a duration	Unity of action, flow
Stager	Representational context and design of the interactive application
Guest	Audience/interactive participant
Sensations	Multisensory and interactive

tionally designed to change a person's attitudes or behavior in a predetermined way. This point about intentionality may be subtle but it is not trivial. Intentionality distinguishes between a technology's side effect and its planned effect. (p. 17)

Applications of persuasive technologies include a computerized doll designed to motivate responsible sexual behavior, a CD-ROM that persuades kids to eat fruits and vegetables, and a virtual social environment that increases safety by motivating responsible drinking. These examples illustrate that persuasive computers function in three basic ways—as tools, as media, or as social actors. Each of these approaches offers a different pathway to persuasion:

- Tool: increase abilities.
- Social actor: creates relationships.
- Medium: provides experience.

Persuasive technologies may be either elective, chosen by the target audience, or non-elective, imposed upon the target audience. Hygiene Guard, a hand-washing monitoring system, is an example of a nonelective application of persuasive technologies; employees don't choose to use this system, but have to use it as part of their work activities. Two examples of elective persuasive technologies—used voluntarily—are the web applications On-sale.com and Scorecard.org. These applications are used by adults who choose to use them, thereby accepting as incidental the persuasive intent of their designers.

King and Tester²⁰ point out that while computers have long used motivational strategies (such as fantasy, competition, and positive reinforcement in educational software), the emergence of technology applications with the design goal of persuasion is a significant—and potentially controversial—new direction in the design of computing systems.

At first glance, it might seem that persuasive technologies exist solely to help sell products. But this is not the case. According to King and Tester,¹⁹ selling is only one region of the persuasive technology landscape—and the least interesting to view. Most existing persuasive technologies are aimed at teen and preteen chil-

dren. "This finding may seem surprising, but considering that most cultures are comfortable shaping the attitudes of their youngest members, it seems inevitable that the early examples of persuasive technologies would be geared toward children, not adults."¹⁹ But it can be expected that more and more, persuasive technologies, both elective and nonelective, will be aimed at changing the attitudes and behaviors of adults as well as children. Persuasive technologies are an important emerging area of experience design that has vital implications for education.

A SENSE OF PLACE

Pine and Gilmore link their concept of the experience economy to sociologist Ray Oldenburg's²¹ notion of a "third place," a physical (or now virtual) place set apart from home and work, where a person can interact with others he has come to know as members of the same community. The trend toward suburbanization over the past several decades has disrupted people's access to the traditional local spots that served as a "third place" in traditional communities. But now many enterprises are trying to fill this gap, including online communities, theme vacations and workshops, Starbucks coffee shops, and bookstores such as Barnes and Noble and Borders that offer coffee shops and other spots for socializing in addition to the experience of bookstore browsing. These are places people go to seek out the experiences they desire.

Oldenburg²² explains the characteristics of third places:

Third places exist on neutral ground and serve to level their guests to a condition of social equality. Within these places, conversation is the primary activity and the major vehicle for the display and appreciation of human personality and individuality. Third places are taken for granted and most have a low profile. Since the formal institutions of society make stronger claims on the individual, third places are normally open in the off hours, as well as at other times. The character of a third place is determined most of all by its regular clientele and is marked by a playful mood, which contrasts with people's more serious involve-

ment in other spheres. Though a radically different kind of setting from the home, the third place is remarkably similar to a good home in the psychological comfort and support that it extends. (p. 42)

These are the qualities that people desire in their informal public spaces—including gathering spaces in cyberspace. In designing experiences involving human interactions, it is good to keep these guidelines in mind. And these guidelines are relevant to human–computer interactions: Reeves and Nass²³ report that all people automatically and unconsciously respond socially and naturally to media. According to these analysts,

Humans are experts on social relationships, and they are experts on how the physical world works. Rules on using media as tools, on the contrary, are often arbitrary and must be learned. When media conform to social and natural rules, however, no instruction is necessary. People will automatically become experts on how computers, television, interfaces, and new media work. (p. 9)

This research shows that media are perceived as real people and places and that human responses to media are determined by the rules that apply to social relationships and navigating the world. So the rules of social behavior provide a powerful set of guidelines for designing experiences where people interact with communication media.

Pine and Gilmore recognize the importance of the social, participatory dimension of cyberspace. They point out that America Online won the battle for members from other online service providers primarily because AOL understood that people wanted a social experience, where they could actively participate in the online environment growing up around them:³

While Prodigy at one point limited the amount of e-mail its members could send and CompuServe limited member identities to a string of impersonal numbers, AOL allowed its members to pick up to five screen names (to suit the several moods or roles they might want to portray online) and actively encouraged the use of features that connect people: e-mail, chat rooms, instant messages, personal

profiles, and “buddy lists,” which let users know when their friends are also online. (pp. 34–35)

America Online members spend more than 25% of their connect-hours in chat rooms where they can interact with other members.

It is interesting to note that Xerox has gone to great effort to understand the patterns of social interactions between technicians in the field so as to understand how knowledge (in the form of anecdotes or stories) is informally shared and bootstrapped, enhancing the expertise of all the technicians. Xerox wants to encourage this kind of knowledge sharing. This kind of informal knowledge-sharing forum, which corresponds to Oldenburg’s notion of a third place, is readily transferable to cyberspace and, indeed, the multitude of discussion forums and chatrooms in cyberspace are a testament to this. Educators need to figure out how to make optimal use of this kind of online community-building, including both formal and informal communication forums.

This aspect of experience design is very important for universities designing cyberspace campuses. The college experience is highly social or interpersonal, both inside and out of classes. The cyberspace campus needs to retain this social dimension. And indeed, cyberspace offers great potential in this area with class discussion forums and interest group discussion forums for students, alumni, prospective students, and others. Universities can provide the service of helping people connect with each other in purposeful, productive ways online.

EXPERIENCE DESIGN AT THE INTERFACE

Another set of related ideas, on a nuts and bolts level, comes from Seybold.¹ An expert on marketing and electronic commerce, Seybold emphasizes the importance of designing online interfaces and interactive features—what the user sees and interacts with—so that they provide an easy to use, enjoyable, engaging experience. Even at the level of interface design, before students arrive at the presentation of the content, it’s important to design with the concept of experience in mind. In her book, Sey-

bold describes many strategies for improving interface design—in ways that support marketing goals. This is an important consideration for distance education, especially as competition increases. And it fits within the comprehensive model of experience design.

Seybold¹ explains the importance of providing the audience with a positive, memorable experience at the level of the interface, as well as the interaction and feedback that are offered. For example, she highlights Amazon.com as an example of web-based commerce that pays attention to the customer's experience in a number of simple, but powerful ways: customers can submit their opinions concerning the books that are offered for sale; a profile of each customer is built up with each purchase so that book recommendations can be made; each customer even has the option of further customizing that profile; and after an order is placed, an email message confirming the order is sent to the customer. These are just some of the ways that Amazon.com successfully creates compelling experiences for the customer. and this is only one company; there are lots of other examples.

Seybold¹ has some valuable insights concerning experience design in the context of the World Wide Web. She identifies eight critical success factors for electronic commerce:

1. Target the right customers.
2. Own the customer's total experience.
3. Streamline business processes that impact the customer.
4. Provide a 360-degree view of the customer relationship.
5. Let customers help themselves.
6. Help customers do their jobs.
7. Deliver personalized service.
8. Foster community.

Seybold emphasizes that good service is proactive experience. She explains the importance of owning the customer's total experience as follows¹:

What worked for me was the fact that, in each case, I was dealing with a company with a "personality." The human touch came through. In fact, it came through better than it probably would have had I been battling crowds in a physical store. I could get infor-

mation when I needed it, without having to look around for someone to ask or waiting in line at the checkout counter. In fact, there was no waiting, no annoyance; just satisfaction and peace of mind. These companies have all done a great job of giving me the total experience I really want and respect. (p. 105)

This corresponds to what Reeves and Nass²³ and other analysts discussed above are advocating.

According to Seybold,¹ customers like to have a well-orchestrated, well-designed, predictable experience of doing business with you. Yet they also want to feel in control. They need to have the ability to call the shots, to tailor their own experience to fit their individual circumstances. This corresponds to Pine and Gilmore's notion of the sweet spot—for a particular goal and context—putting in place design features that support the purpose and eliminating or redesigning features that detract from the purpose.

Seybold¹ explains that there are a number of things a company must do in the cyberspace environment in order to build the kind of customer loyalty that accrues to companies that take responsibility for owning the customer's total experience. They are:

- Deliver a consistent, "branded" experience.
- Focus on saving customers time and irritation.
- Offer peace of mind.
- Work with partners to deliver consistent service and quality (i.e., a cohesive experience).
- Respect the customer's individuality.
- Give customers control over their experience.

Seybold¹ points out that most virtual companies, including Amazon.com and Security First Network Bank rely heavily on partners to complete their offerings. Security First outsources virtually all of its operations. Yet from the customer's perspective, it feels as if you're dealing with a single, well-oiled organization. Everyone who deals with you has the whole picture about your accounts and the status of your dealings with the bank. Universities need

to strive for this kind of customer service in their cyberspace campuses.

Of utmost importance, Seybold¹ explains,

It's not really possible to offer customers a "total" experience without treating and serving them as individuals. No matter how good and consistent the experience is, if you're made to feel like part of an assembly line, as you do at most fast-food restaurants, for example, you aren't as likely to become a loyal devotee. On the other hand, as soon as a business begins treating you like the important individual you are, your loyalty soars. (p. 100)

CONCLUSION

Mok²⁴ points out that everything around us is designed. According to Mok, "The biggest challenge designers face in working with the computing medium is not mastering the various technologies that are its constant companions, but introducing meaning and life into the products and services on the human side of the screen" (p. 4). Experience design addresses both sides of the design equation, with important implications for the design of educational experiences. As this article has shown, there are some powerful conceptual models and proven practices that are emerging in experience design, at the convergence of a number of fields that impact upon design, including economics, electronic commerce, psychology, sociology, communications, computer science, theater, and entertainment. Design, research, and theory-building in several diverse fields have found a common goal in the quest to design experiences that serve some purpose in a compelling and memorable way. Many well-tested design ideas from outside of education, from a wide range of fields and applications, offer great potential for the design of online classes and university campuses in cyberspace.

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