10-1-2000

Meeting Psychological Needs in Web-based Courses for Teachers

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ABSTRACT

Two teacher educators describe their efforts to design and deliver online graduate courses for practicing teachers that meet psychological needs for belonging, freedom, power and fun (Glasser, 1999). Strategies to promote belonging include welcome letters, icebreaker and cooperative learning activities, personal Web pages, liberal office hours, private e-mail messages, and personalized responses to student postings, and public acknowledgement of student accomplishments. To ensure freedom for all participants the authors use minimum participation requirements, clear but flexible deadlines, multiple project options, Internet links, and access to all students' work and projects. To empower their students, the authors provide ample technical support, a course bulletin board, performance assessments, and frequent opportunity to apply course material to experiences. To enhance the excitement of online learning, authors use an inviting welcome page, humor, contests and games, group projects, multimedia, and emoticons.

I expected that the course would be very distant, a class where my classmates would have no names or faces. But I feel very honored.... You all have great insight and have always been there for me (sixth-grade teacher).

I am generally a very shy person.... Normally I do not answer questions in class and I prefer to keep to myself. That was not the case in this class. I really got into the class, into the people that I had class with and that has made all the difference (high school social studies teacher).

For the past two years we have been offering Web-based staff development and graduate education courses for practicing teachers in technology, curriculum planning, learning theories, and teacher research. Our courses, which use the courseware package LearningSpace (Lotus Notes Corporation, 1998) are taken primarily by K–12 teachers who are interested in the convenience and flexibility of online staff development or work on an advanced degree.

As teacher educators we are especially interested in making sure that our online course design and pedagogy model what we know to be optimal for learning (Schweizer, 1999). We try to make our courses places where students can actively engage in learning with others (Brooks & Brooks, 1993; Johnson & Johnson, 1999) and show what they have learned in multiple ways (Campbell, Campbell, & Dickenson, 1999; Gardner, 1993). In addition, we make a conscious effort in each of our courses to meet what Glasser (1999) calls the four psychological needs that all people are constantly trying to meet: needs for belonging, freedom, power and fun. From both written surveys and informal interviews with more than 400 students who have taken our online courses, we have identified a number of specific strategies that help us address these needs. We are finding that as we have worked harder to consciously build in these multiple supports for students' psychological needs in our online courses, we have had higher student ratings for our courses, and our student retention rates have gone up from 80% to 95% in all of our courses.

Meeting the Need for Belonging

Learning online can be an isolating experience. Online learners need to know that

the teacher cares about their success and is available for help. Similarly, they want to feel the presence and concern of their classmates. Our students tell us that they have felt stronger bonds with students in their online classes than they usually do in traditional classrooms. "You have all made such a difference in my life," one student wrote his fellow students at the end of an online technology course. " I never expected that I would feel very much involved in what goes on in your lives..." wrote another. And still another explained why she felt so committed to being a regular participant in the discussions: "There is so much engaging and exciting interaction that takes place that if you miss it you feel left out."

Creating a learning environment that fosters such a sense of community on the Web, however, requires careful and deliberate planning. Strategies that can help create these bonds include informal welcome letters, icebreaker activities, personal Web pages for students, team building and cooperative learning activities, liberal office hours, individual e-mails and phone calls, and personalized responses to student postings.

Informal welcome letters
Before any class starts, we send an informal welcome letter to each of our students introducing the course content and ourselves. In this letter, in addition to pertinent course information, we share information about our families, special professional and personal interests and hobbies.

Icebreaker activities
At the beginning of each course we create engaging activities that encourage students to get to know one another. We have asked our students to share their favorite book, recall a memorable learning experience, reveal their best liked bumper sticker or guess which one of three autobiographical statements entered by each student is false.

Personal Web page for each student
The courseware package that we use makes it easy for each student to share pictures of themselves, hobbies, information about family or work, e-mail ad-
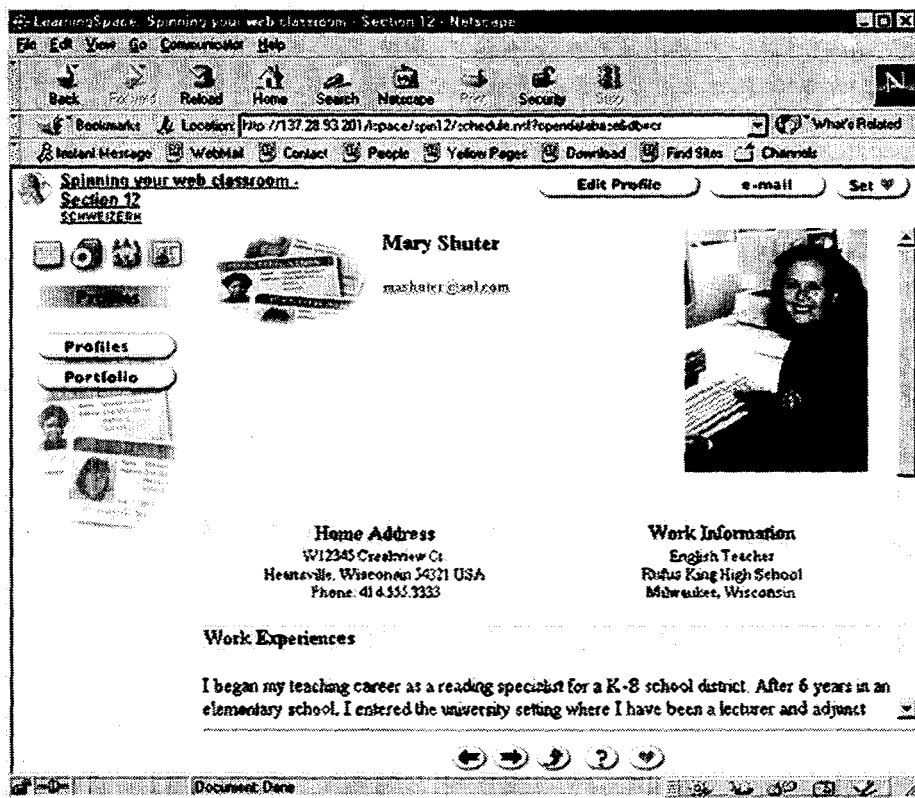

Figure 1: Mary.

dresses, and phone numbers on a separate Web page. Figure 1 is an example of one student's profile.

Team building and cooperative learning activities
We build in multiple opportunities for collaboration throughout our courses. At the beginning of each course we create small discussion groups of six to eight students. To build group identity and cohesion, each group decides on a group name, and each group member assumes one of following roles: technician (offers technical advice and assistance); summarizer (writes up and posts summaries of weekly discussions); encourager (contacts via e-mail or phone fellow group members to encourage participation); and devil's advocate (poses questions and counter-arguments throughout the discussions). Sometimes, these roles are held by more than one group member, and sometimes the roles are alternated from week to week.

Liberal office hours
We commit to checking our e-mail as well as the course discussions daily and re-

sponding to our student questions and discussions within 24-48 hours.

Individual e-mail/phone calls
In an effort to support individuals who are having personal or technical problems, as well as students whose work is particularly strong, we frequently use private e-mail or phone messages as another way to stay in touch and demonstrate we care about each student's success in the course.

Personalized responses to student postings
We make every effort to get to know our students personally and in our responses make specific references to their schools, work contexts, special interests and areas of expertise. We use a friendly, informal writing style, address students by first names and make sure that we acknowledge strengths. For example, in a recent discussion in a foundations of curriculum class about the "hidden curriculum," in response to a teacher who was very critical of her own tendency to teach math in a mechanical way, one of the authors (who teaches the course) replied:

I have been thinking about your story all day, Sarah, and about your courage to share it. I think we can all look into our closets and find ways of teaching that we are not proud of. But I absolutely agree with Sean, Paul, and Lisa! Your openness to learning and change will greatly benefit your future students. And you raise an important question. How can you introduce discussions and strong student/teacher interaction to students who have not been exposed to such teaching methods?

Public and personal acknowledgments and celebrations

At least once a week on our announcement page we call attention to specific entries and remarks by students and acknowledge them by name. In the curriculum course mentioned above, for example, the instructor summarized one week's discussion on the purpose of schooling in Figure 2.

At the end of our courses we hold virtual conferences and celebrations where students display their final projects, offer feedback to each other, and have the opportunity to express their farewells.

Meeting the Need for Freedom

Our students tell us that they enjoy the choice to "respond to messages in the middle of the night... as opposed to trying to make it to class once a week and share the two hours with 15 other students." We find students in our courses at all hours of the day, including early in the morning, late at night, and on weekends. Students also say they enjoy participating in a discussion or completing assignments at a pace and in a place that more closely suits their learning and lifestyles. One student, for example, told us that she works better sitting at home listening to her favorite music with her shoes off and surrounded by her collection of African art. Others prefer accessing the course at their schools during free periods or even on an airplane flying to Orlando and on vacation in Alaska. In addition to flexibility of access, students also speak of the greater freedom of expression that they find online where "each student gets a
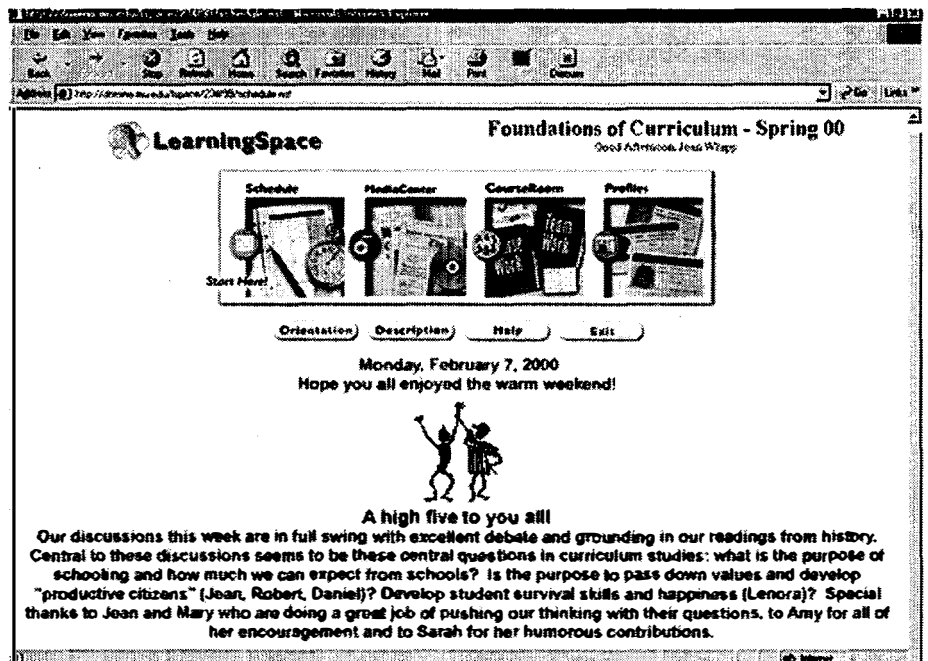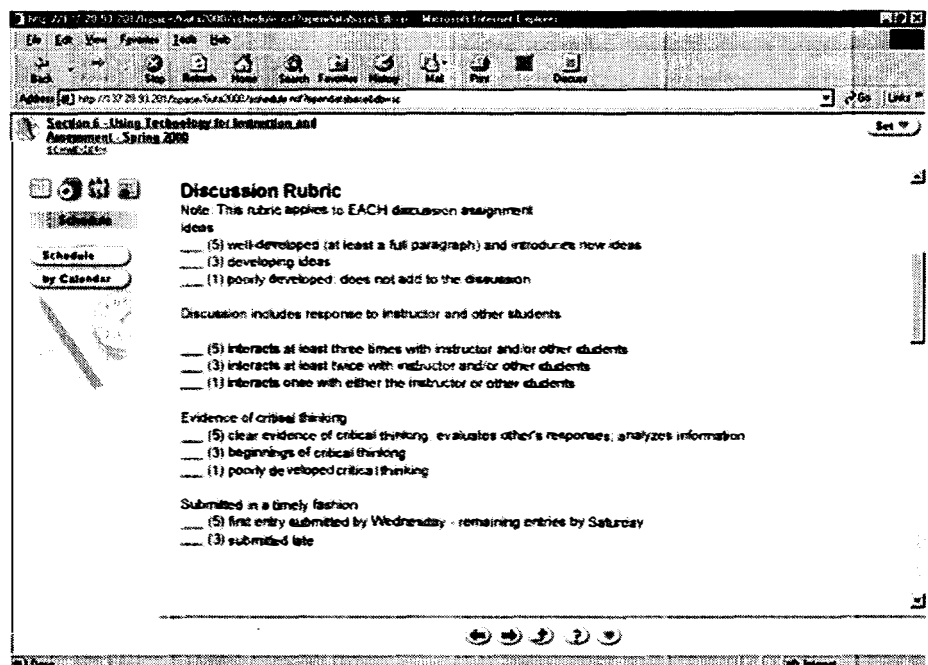
Figure 2: High five.

Figure 3: Rubric.

voice" and where "people tend to.... exercise their freedom of speech more freely." People seem less inhibited "about expressing certain intimate feelings" than they do when they are face to face.

With all of this freedom, however, comes individual responsibilities. We have learned that for all students to take full advantage of the freedom that is available in an online course, we need to provide a number of supports, including

guidelines and deadlines for participation, a variety of project options, links to Internet resources, and access to the work and projects of their fellow students.

Minimum participation guidelines

To ensure everyone's freedom to interact in this environment, we ask each student to enter at least three postings in each discussion, with the first posting early in the range of dates for the discussion. In each

of our courses we post a rubric that we use to evaluate student discussions. While offering some restriction, the criteria offered in our rubrics still offer a wide range of choice for the student in level and intensity of involvement. Figure 3 is an example of a rubric we have used in one of our technology courses.

Clear but flexible deadlines for discussions

We have found that a range of dates from five days to one week with a due date for the initial posting seems to offer flexibility but at the same time insure maximum student interaction.

Project options

Paying particular attention to integrate what we know about multiple intelligences (Campbell, Campbell, & Dickenson, 1999; Gardner, 1993; Checkley, 1997) into the design of our course assignments, we offer choices to complete projects in a variety of formats including: PowerPoint presentations, video conferences, drawings, Web pages, research papers, poetry, stories, speeches, games, group projects, video performances, proposals, debates, graphic organizers, brainstorm lists, and reflective journal entries.

Internet links

For each of our course topics we create a wide range of Internet links that offer the choice to explore ideas in greater breadth and depth. In addition, these Internet sites enrich our learning environment with interesting visual and auditory features. For example, in a number of our courses we have used Web sites found at ThinkQuest (http://library.thinkquest.org/library/index.html). This is the library site of ThinkQuest, an international student competition for interactive, multimedia websites in a variety of curricular areas including the arts, literature, language, mathematics, science, history, politics, sociology, and technology. Two interactive Web sites that we have used in an online science course for teachers are Virtual Cell (http://ampere.scale.uiuc.edu/~mlexa/cell/cell.html) and Cells Alive! (www.cellsalive.com). In one of our tech-

nology courses, The Copyright Web site (www.benedict.com/) and Copyright Bay (www.nmjc.cc.nm.us/copyrightbay/) are Web sites that encourage the visitor to grapple with the complexities of copyright law in the 21st century.

Access to student projects and assignments

Having the opportunity to read what others students are thinking, writing, and doing in the course adds another dimension to the learning possible in this environment. Students can choose to read as much or as little as they please.

Meeting the Need for Power

Learning online combines the satisfaction of mastering the use of powerful technological tools (e.g., computer conferencing, presentation software, the Internet, e-mail, Web-based courseware packages) as well as the sense of accomplishment that comes from taking charge of one's own learning. One student describes the excitement that he feels as he takes charge of his own learning in this environment: "This Web-based stuff gives me a chance to go out into cyberspace and retrieve a poem or story or

Web site information that the assignment at hand has caused me to remember or want to find. Then, for my own delight and, I hope, for the edification of classmates whose lateral thinking has, no doubt, gone off in other fertile directions, I can fold the object of my recollections (the poem, the Web site) right back into the discussion."

To ensure that this learning environment is empowering for all students, however, we have learned that several supports are critical: ongoing technical assistance, a course bulletin board, performance assessments and rubrics, and frequent opportunities to apply course material to professional work.

Technical support

For all of our online courses, we make available a technical support person who can be reached by phone or e-mail and who can answer questions and offer assistance on software or hardware problems. From the very beginning of the course we try to stress to students that no question is too stupid. We find that the ongoing availability of such a resource helps students more quickly maximize their success in this environment.
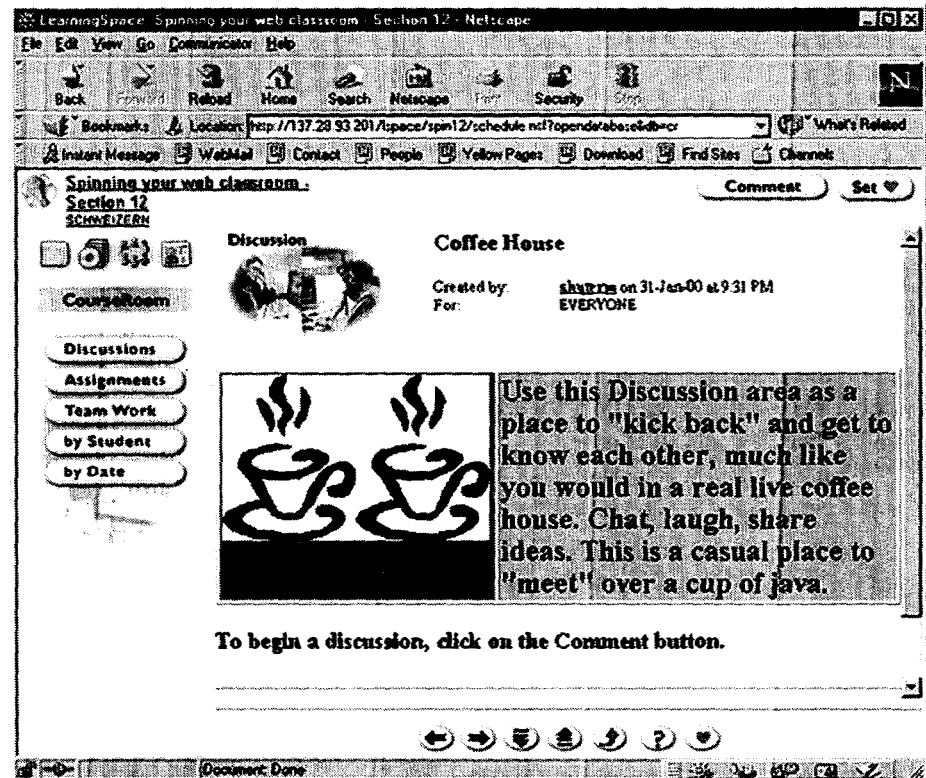

Figure 4: Coffee House.

Course bulletin board

We use a bulletin board space where students are encouraged to post announcements, initiate discussions or surveys, and share resources. In this way students are given the opportunity to shape course activities and curriculum. Figure 4 shows how we created an online "Coffee House" in one course for informal chats and opportunities for students to share resources.

Performance assessments, rubrics, and checklists

In all of our online courses, we use group and individual projects along with rubrics or checklists that spell out clear criteria for evaluating mastery of and practical application of course material. We continually encourage our students to use the rubrics to evaluate their own work in our courses and to revise their work, if necessary.

Frequent opportunities to apply course material to experience

Throughout our courses, we constantly encourage students to apply course topics to their own teaching or work settings. We find that as students do this, they are frequently recognized and affirmed by their fellow students for their valuable contributions and, as a result, they experience greater success.

Meeting the Need for Fun

With the click of a mouse, the rich online learning environment offers opportunity for fun, novelty, and adventure. One student compared her learning theories class to "a roller coaster" in that it was "both scary and exciting" while another described her online classes as a "hoot...like having five pen pals all at once."

We have found that a number of elements can add to the fun and excitement of an online course: an inviting welcome page, humor, contests and games, group projects, multimedia, and emoticons.

An inviting welcome page

When students enter our courses, the first page that they see is a frequently updated announcement page. In addition to reminding students of upcoming assign-
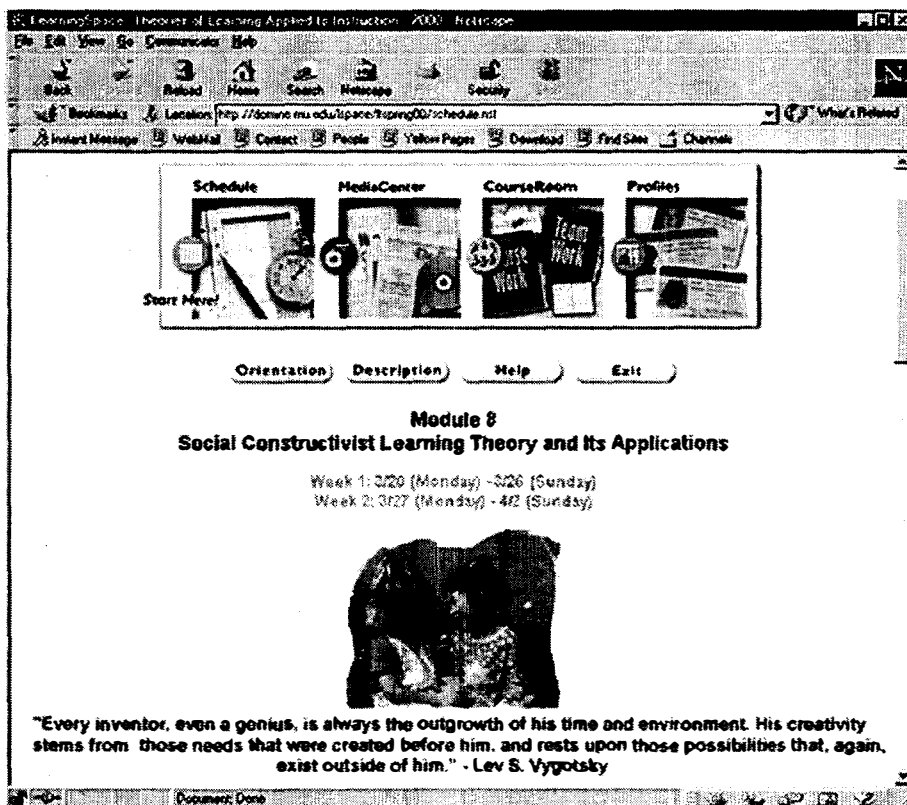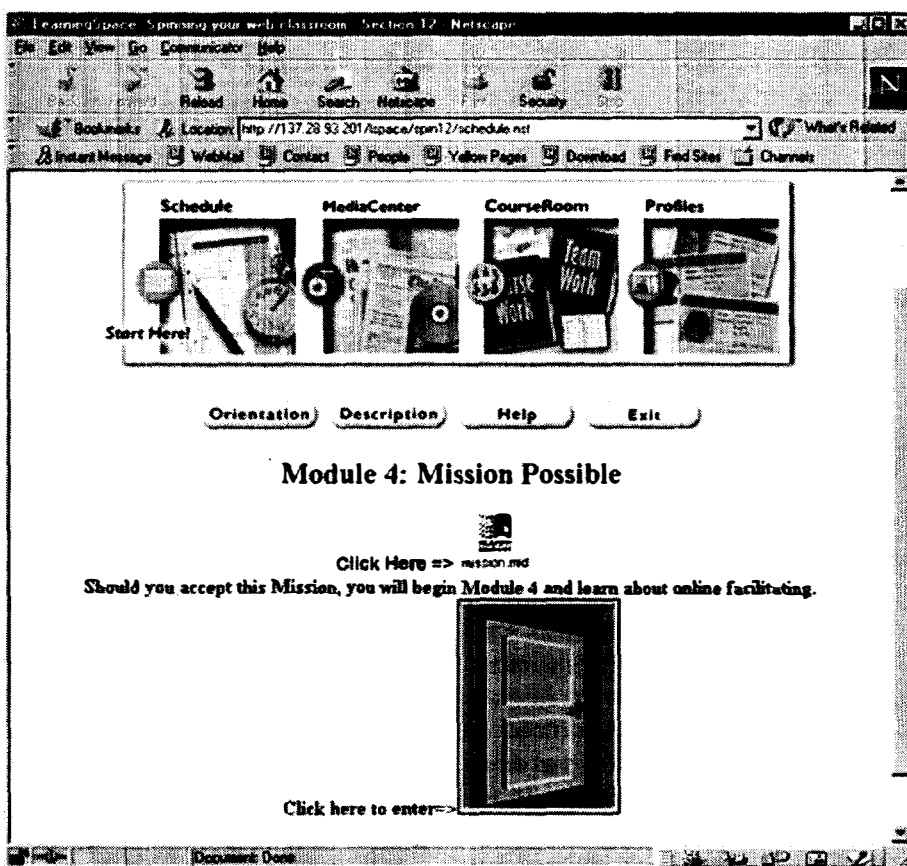

Figure 5: Little girls.

Figure 5: Door.

ments and events, we include on this page informal comments about upcoming holidays, personal experiences, and sport events. We try to make this page fun and inviting with colorful graphics and cartoons, interesting quotations, and amusing anecdotes. For example, Figure 5 shows the welcome page in a learning theories course module on social constructivist learning theory.

Humor

As much as possible we try to insert humor into our courses in our responses to student postings, in the titles we use for our postings, as well as on our announcement page. We encourage our students to share jokes, cartoons, as well as humorous audio or video clips that we can post on the welcome page. For example, Figure 6 shows a welcome page in one of our courses inviting students to enter the module through an animated door with a "Mission Impossible" sound clip playing in the background.

Contests and games

We find that occasional individual or group competitions can add a dimension of excitement and fun to an online course. In our courses, we have included Internet scavenger hunts, brainstorming activities and guessing games with a special cybergram awarded to the group or individual who posts the longest list or comes up with the correct guess.

Group projects

We offer students the opportunity to work on projects in small groups. Our students, as well as Johnson and Johnson (1998) tell us that the collegiality and sharing that comes from this work makes learning more enjoyable.

Multimedia

As mentioned earlier, when possible, we try to link students to good online web sites that make full use of multimedia, including video, sound, music, animation as well as hypertext links. We also use videotapes, audiotapes and CD Roms, in addition to books and articles, as course materials. In addition, wherever possible,

we try to use multimedia in the design of our course Web pages. The Internet offers many excellent sources for free multimedia. Some Web sites that we have found to be particularly helpful are: Web Developer's Virtual Library (www.wdvl. com); Mark Harden's Artchive (www. artchive.com); Media Builder (www. mediabuilder.com); and Barry's Clip Art (www.barrysclipart.com).

Emoticons

:) a smile, ;) a wink and a smile, :(unhappiness, { } a hug, :-# speechless. As much as possible we try to insert this computer "body language" into our online responses and comments to insert both humor and feelings into our learning environment.

Where to Start

Designing and implementing a web-based course that is highly interactive, rich in resources and meeting the psychological needs of each learner is a major undertaking. A knowledge of curriculum design, learning theories and Web-based applications is essential. We have found that a team approach to online course development maximizes our individual strengths while minimizing areas of weaknesses. For all of our courses we rely on the expertise of a content specialist, a curriculum designer and a technician. Together, we work to create an online experience that reflects what we collectively know about robust learning environments.

For a first hand look at such an environment, we invite you to explore an abbreviated version of our online course Spinning Your Web Classroom, an introduction to designing and teaching online (www.mu.edu/education/dl.html). There you will see many examples of how we are meeting our student's needs for belonging, freedom, power and fun in a Web-based course. We are convinced that our careful attention to these needs both in the design and delivery of online courses not only helps our students become highly engaged; we as instructors are also drawn into the environment, able to connect and enjoy our "distant" students in very powerful ways.

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