SOME STRATEGIES FOR BALANCING ECONOMIES OF SCALE AND INTERACTION IN ONLINE/DISTANCE EDUCATION COURSES

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Abstract

After reviewing the literature on interaction in distance education/online learning contexts, I offer some suggestions for balancing students' and teachers' needs for greater interaction with the economies of scale often achieved in such learning contexts. Specifically, I suggest that instructors' use of threaded online discussions and student small learning groups will maximize interaction while also enhancing learning. Additionally, I recommend that instructors incorporate individual student learning styles into the instructional design of their online/distance education courses. I conclude by discussing the ways that these three strategies are particularly useful when teaching business-related courses.

Personnel shortages combined with declining educational budgets are leading many universities to reduce course offerings, rely on non-tenured faculty members, increase class sizes and leave faculty positions unfilled. These and other strategies provide only short-term remedies to what seems destined to be a national and a long- term fiscal problem. Online instruction and/or distance education offers a viable and more creative alternative. Defined by Sankaran & Bui (2001, p.191) as, 'the process of instruction and learning via virtual classrooms where teachers and students are separated in space and sometimes in time,' online instruction or distance education is offered by the majority of two and four year colleges and universities across the United States. In fact, according to the National Center for Educational Statistics (cited in Rovai, 2004) U.S. enrollments in post-secondary distance education classes nearly doubled between 1995 and 2000. Because online instruction can (a) prevent the need to farm out courses to less qualified instructors, (b) stem the creation of unmanageably large classes, (c) increase instructor efficiency, and (d) enrich student learning, it is becoming increasingly relied on to deliver education more cost effectively (Rovai, 2004; Sankaran & Bui, 2001).

An important impediment to perceptions of effectiveness online instructional contexts is its lack of interaction. This is problematic because interaction is

vital to information exchange in educational contexts (Keegan, 1990; Sewart, 1982). For the purposes of this paper, interaction encompasses student and teacher immediacy behaviors (sometimes referred to as social presence) and student learning styles and strategies. Interaction has been associated with, among other things, student and faculty satisfaction (Hartman & Truman-Davis, 2000), instructional outcomes (Picciano, 2002), and persistence (Tello, 2004). It also facilitates greater learner control, participation, meaning and personalized learning and community building. Clearly, more interaction is not always better. Instead, the goal is to appropriately balance independent study with interactive learning strategies because interaction among teacher, student and course content is fundamental to education (Shale & Garrison, 1990a).

In this paper I focus on two interaction-related obstacles to online learning and instruction: a lack of student and teacher immediacy behaviors, and a failure to integrate students' learning styles into online course design. After reviewing the relevant literature about interaction in online learning contexts, I discuss the three strategies that can maximize interaction for distance learners and instructors. I conclude by presenting specific ways that online instruction can enhance teaching in business communication courses.

Review of the Related Literature

Interaction Defined

Chiou & Chung (2003) identified five types of instructional interaction in distance education settings: learner-teacher, learner-learner; learner-content; learner-interface and learner-individual. According to Moore & Kearsely (1996) learner-teacher interaction is interaction between student and teacher. Learner-learner interaction is peer interaction between students. Learner-content interaction is interaction between students and instructional media such as the text, broadcast television and audiotapes. Hillman, Willis and Gunawardena (1994) defined learner-interface interaction as the interaction students have with the technological medium of distance education in order to interact with the content, teacher or other students. Finally, Hwang (1992) described learner-individuals interaction as students doing their own things during distance education courses, including, for example, communicating with other students.

Interaction comes in many forms and is absolutely critical to all forms of education. However, because learner-individual interaction and learner-interface interaction are outside of the bounds of this discussion, only the remaining three types of interaction will be discussed further. I turn first to teacher-student interaction and immediacy behaviors (e.g., social presence) because it currently has the highest perceived value among students and thus, commands the highest market value.

Impacts on Interaction and Learning in Online Learning Contexts

Learner-Teacher

Insufficient interaction is often cited as a major problem for both students and instructors engaged in distance education and/or online learning and instruction. In contrast to traditional classroom teaching, online instruction does not include face-to-face teaching in the same classroom. This obviously decreases teacher-learner interaction and often mediates students' decisions to take online courses (Tello, 2004). Furthermore, the perceived lack of interaction leads some instructors (e.g., Yueh, 1999) to suggest that online instruction lacks humanization. Students' and teachers' perceived lack of interaction also tends to reduce their perceptions of learning effectiveness. In fact, several studies have documented the positive correlation between students' level of interaction in online and/or distance education courses and their satisfaction with and learning in such courses. For example, Kanuka and Anderson (1998) reported that learners found limited social interaction in online versus face-to-face formats less satisfying and Dozier (2001) noted that a lack of facial expressions and gestures contributed to learners' lack of satisfaction with online discussions. Often, facial expressions and body language are teachers' vital clues to the level of student understanding and engagement and often are critical to recognizing "teachable moments."

According to Baringer and McCroskey (2000) positive teacher immediacy behaviors have been linked to student affect for teacher, learning and motivation toward studying the content of the class. For example, Freitas, Myers and Avtgis (1998) reported that both nonverbal and verbal immediacy behaviors had an effect on student affective, behavioral and perceived cognitive learning. Similarly, Frymier (1993) found that classrooms with high teacher immediacy also had students who reported more psychological arousal and affect toward a class. Thus, the presence of teacher immediacy behaviors in classrooms can have tremendous pedagogical benefits that are not possible in online and/or distance education settings. That, in turn, reduces teacher-learner interaction in online instructional contexts. Social presence is another mechanism by which interaction between teachers and learners has been measured.

Defining social presence as comprised not only of immediacy behaviors (e.g., nonverbal and verbal forms of communication), but also intimacy, Short et al. (1976) emphasized consideration of smiling and eye contact. Rourke et al. (1997) defined social presence as the ability of learners to project themselves socially and affectively into a community of inquiry. Building on both definitions, Gunawardena and Zittle (1997) examined the impact of social presence on student satisfaction with online distance learning. Their data suggested that most of the variance in overall satisfaction with the course could be explained by students' perceptions of social presence.

These data suggest that immediacy behaviors, verbal and nonverbal, are a critical element of both teacher and student perceptions of satisfaction and learning in online instructional contexts. Student attitudes toward the course are affected by the level of interaction they have with instructors. Teachers

can use immediacy behaviors to signal critical information that bears on students' desire to be in the class and to be involved more fully in the learning process. Conversely, teachers report that immediacy behaviors are essential. For them, these behaviors help teachers assess learning, encourage participation and gauge student interest. One drawback of these studies, however, is that they fail to link immediacy behaviors to actual learning. Although teachers and students each report more positive perceptions of learning and teaching in online instructional contexts, we do not know how this impacts what is actually learned. However, later in this paper when interaction is linked to students' learning styles and strategies as one means of affecting actual learning, this limitation is overcome. Teacher-learner interaction is not the only type of interaction that is critical to online instructional success. Also important are the levels of interaction among learners.

Learner-learner

Greater interaction among students is also important in online learning contexts. It can help establish rapport and collaboration among learners while also aiding in the achievement of instructional goals (Gilbert & Moore, 1998). Additionally, student-student interaction is critical for learning designs based on collaborative or cooperative tasks. However, peer interaction is often negatively affected by distance or online instruction. Chiou and Chung (2003) surveyed students who reported that (a) they had more interaction in conventional versus distance or remote settings, and (b) the amount of interaction with on-site peers was both limited and unsatisfactory. In another study, Swan (2001) surveyed students taking online courses at the State University of New York. She found that students' satisfaction with the course and learning performance were positively correlated with greater interaction with other students. Similarly, in a study by Rourke and Anderson (2002) of graduate students taking online courses, the data suggest that student involvement in the course was enhanced because of the online discussions led by their peers. Finally, Chen (2001) reported that student-student interaction was critical to satisfaction with, and learning in online environments. Using Moore's (1980) notion of transactional distance (i.e. functions of dialogue and course structure) to assess student interaction, Chen reported that the learner-learner factor explained 33% of the variance in transactional distance. Specifically, accessibility to other learners, communication with them, agreement and understanding of other students' ideas and quality of interaction with other students enhanced their level of involvement in the course.

In summary, though learner-learner interaction may be less emphasized than instructor-learner interaction, it is clear from the literature that it plays an important role in students' perceptions of satisfaction with, and learning in the course. Student perceptions are, however, a source of criticism for this research. There are studies that suggest that such perceptions are not a good measure of learning or satisfaction. Wallace (2003) pointed to Salomon's (1984) research on students' perception of self-efficacy when learning via television versus print material. Although students reported greater self-efficacy in the television mode, they also reported learning more from the print

material. Additionally, this literature infrequently examines learning content as a result of online interaction. When such studies have been conducted, they consistently suggest that higher-level learning is not achieved. Much more research needs to be done and it needs to take the perspective of learners. As Hara and Kling (2000) pointed out in their study of graduate student perceptions of an online course, the instructor of the online course remained unaware of much of the frustration students were having with the course.

Learner-Interface

According to Hillman, et al. (1994) interaction in distance education requires some form of mediated communication, including print, electronic, mechanical or other communication devices. It is precisely the need for mediated communication that distinguishes distance education from conventional educational contexts. In technologically mediated communication contexts, such as online learning via the Internet, learners unskilled in interacting with the communication medium must dedicate a significant amount of time and mental resources to retrieving information. This leaves fewer resources available for learning course content.

In a study by Gilcher and Johnston (1988) an instructor noted having to teach the course on two levels: (a) one that dealt with course content and (b) one that dealt with the mechanics of using the technology associated with delivery of the class. Hillman et al. (1994) suggest that it is not much different for students. They too are often faced with the need to learn on two levels. Before attending to equally important but unrelated matters of course content, students must learn to interact with the technology used to deliver the course. If their experience levels are limited and/or they are fearful of working with the technology, that too can mitigate success in distance or online learning contexts. Thus, in situations where learners are unfamiliar with the technology or reticent to either use it or seek assistance, the interface can become an independent force with which the learner must contend (Hillman et al. 1994). As a consequence, interaction in terms of mastery of course content can be negatively affected.

To summarize, these studies suggest that interaction, whether defined as person-person, person-group or person-system exchanges, can impact satisfaction with instruction and learning performance in online learning contexts. Specifically, teacher-learner interaction is enhanced by social presence or the immediacy behaviors of both students and instructors. Learner-learner interaction can sometimes lead to greater engagement on the part of other students and often facilitates cooperative and/or collaborative learning designs. Learner-interface interaction tends to emphasize learning on at least two levels, depending on students' familiarity with the form of mediated communication. When the familiarity is low, students are hampered by the need to not only learn course content but also to learn how to navigate the instructional technology. Interaction in online instructional settings is not only affected by student and teacher immediacy behaviors but also by students' learning styles and strategies.

Learning Styles/Strategies

Some research suggests that certain kinds of learning styles and strategies are mitigated in online learning contexts while others flourish (e.g. Busato, Prins, Elshout & Hamaker, 1998; Sankaran & Bui, 2001). As a result, some suggest that online instruction may not be as effective as traditional lecture formats. The current national trend toward greater reliance on online instruction (Rovai, 2004) makes it incumbent on online instructors to not only determine learners' styles and strategies but to fold them into online course design. Learning strategies, according to Sankaran and Bui (2001, p. 191) can be broadly thought of as 'the activities by which learning is achieved.' Their use is essential to academic achievement.

According to Hoecksma (1995) students use either deep or surface level strategies to process information gained in learning environments. When students engage in deep level processing, their efforts are directed at satisfying their own curiosity and understanding the meaning of a task. Conversely, surface level processing involves memorization of facts and disjointed pieces of data, examples and illustrations. Online learning can be affected not only by students' learning strategies but also by their learning styles. Vermunt (1992) proposes four different learning styles students use in educational contexts: meaning directed, reproduction directed, application directed and undirected. Students that have problems processing and coping with the amount of material to study and with discriminating what is important and what is not illustrate the use of an undirected learning style. Students that rely on memorization to reproduce what they learned on exams are reproduction directed. Students that attempt to apply what they have learned are application directed and students that focus on the meaning of what they learn, apply and think critically about what they have learned are meaning directed. Though only a few studies have been completed, there is some research that suggests that learning styles and strategies can affect learning in both traditional and online learning environments.

In a study of the impact of learning style on learning in online versus traditional classroom environments, Sankaran and Bui (2001) hypothesized that students who used deep learning strategies would perform more effectively in both online and lecture settings than students who used surface level strategies. Although that hypothesis was not supported, the data suggested that students who used surface level strategies outperformed those who used undirected learning strategies. Additionally, when students used the same learning style across settings, although no significant performance differences were reported, the results showed that students who used deep level strategies performed slightly better in lecture settings while students who used surface level strategies performed slightly better in online learning environments.

Similar findings leading to the same conclusions were also reported by Sankaran, Sankaran, and Bui (2000). In their research that focused on attitude, learning strategies and ethnicity as predictors of learning in online versus traditional or lecture formats, these researchers also reported that online instruction tends to favor surface over deep learning strategies.

Additionally, however, they also found students' attitude towards course format (online versus lecture format) had a significant impact on: (a) students' choice of course format (b) learning performance. Specifically, these data suggest that when students enrolled in the preferred course format, they performed significantly better. In fact, when students enrolled in non-preferred course formats, they achieved the lowest gain in learning performance.

In summary, these data seem to suggest that online instruction tends to lead students' use of surface level learning where memorization and reproduction are prized. Lecture or traditional classroom settings may provide greater interaction, leading to the use of deep learning strategies. Thus, while it seems clear that online instruction seems to favor surface level learning, some research also indicates that attitude towards course format plays an important role in students' learning-based performance. Secondly, in terms of learning performance, students who use either deep or surface level strategies perform similarly in both the online and the lecture learning environments. Undirected learners, however, struggle to perform learning in online environments. Thus, the conclusion supported here is that online learning environments that are well suited for either the deep or the surface level learner may not be appropriate for the undirected learner. Therefore, to reach these learners online instructors must adapt their course materials, websites and related content to better engage and support students who struggle to select and process appropriate course material. Increased interactivity can provide a foundation for making these kinds of adjustments that will not only benefit undirected learners but all students engaged in online instruction.

Strategies for Enhancing Interaction in Online Courses

Few question the importance of interaction in education. Hillman et al. (1994, p. 34) stated that it is 'practically a given'. Thompson (1990) suggested that interaction is a significant component in promoting positive learner attitudes toward online and/or distance education and Moore (1989) says interaction is vital when designing distance education. Though some have pointed out that students sometimes seek online or distance education courses specifically to avoid interaction, Booher and Seiler (1982) pointed out that learners' avoidance of learner-instructor interaction harms student achievement. Thus, it makes intuitive sense to identify the ways that online instructors can enhance interaction and therefore, learning in distance education courses. Next, I discuss threaded online discussions, the use of small groups and the assessment of student learning styles as three broad strategies that can enhance interaction in online classrooms.

Online threaded discussions

Threaded online discussions are one key strategy for increasing interaction in online courses. Some researchers have tested the hypothesis that online discussions can aid or supplement face-to-face discussions. However, in terms of students' learning rather than satisfaction with online instruction, the results are mixed. Some studies have suggested that online discussions can augment interaction for learners while others have reported that online

discussion does little to increase learning. One explanation for these mixed findings is the type of online discussion; threaded as opposed to email discussion seem to be preferred.

Tello (2004) suggests that because threaded discussions are organized by content and topic, a sort of context is already provided to students. With email, no such organizing aids are provided. As a result, threaded online discussions may enhance learning more than email discussions because students are free to direct their attention exclusively on processing course content. Clearly, learning is not precluded when using traditional email formats. However, for certain students the additional need to organize and contextualize others' email comments diminishes the cognitive resources needed for processing those comments. In turn, mastery of course content can be negatively affected. Therefore, for these kinds of students, threaded online discussions are better than email formats for enhancing learning and interaction.

Student learning in small groups

A second key strategy for enhancing interaction in distance or online education is to emphasize learner-learner interaction by means of small groups. Learner-learner interaction has been described as a range of activities from small group cooperation to the creation of larger learning communities. The formation of groups allows students to both share and critique project work. Additionally, when peers lead online discussions, greater learning often results (Rourke & Anderson, 2002; Swan, 2001). In turn, this shared learning promotes social interaction, leading to the development of community (Hiltz & Wellman, 1997; Gunawardena & Zittle, 1997). Researchers have found that online learning in socially situated contexts such as small groups tends to enhance learning in three ways: (a) group formation, cohesion and identity lead to the feeling of community that can transcend the lack of social presence inherent in online asynchronous learning contexts and (b) group formation supports carefully planned collaborative and/or cooperative learning projects, enabling students enhanced interaction and (c) group formation emphasizes the focused processing of course content via online discussions when groups are required to participate in such discussions. When distance learners read each other's online comments, they form responses even when they don't reply to these comments. In turn, the formation of these responses enhances learning (Guzdial & Carroll, 2002).

In her exploratory study of group interaction and class satisfaction in web-enhanced classrooms, Driver (2002) suggested forming small groups of five randomly chosen students. Each student in the group had access to online group discussion forums for their specific group only. Learners were required to post comments to the discussion forum twice per week and these comments were graded individually at 20% of the overall course grade. Additionally, all groups were assigned one course related discussion topic every two weeks over the course of a semester. They were asked to discuss this topic extensively and then to post a summary of their discussions to the main class discussion forum. As a result, every student had access to all the other group discussions. This allowed students to view several perspectives

on the topic without having to read all the other students' comments individually. The results of Driver's (2002) research suggest that high levels of group interaction stimulated by structured online discussions positively affected perceptions of interaction. Thus, online instructors can enhance interaction by using small groups to create social presence and to allow students to learn cooperatively via structured online discussion.

Integration of student learning styles

A third strategy that online instructors can use to enhance interaction in distance education courses is to incorporate assessments of student learning styles and strategies into the development of their online courses. Specifically, Roeger (1999) suggested that students could complete, for example, the Myers- Briggs learning styles inventory to enable teachers to assess individual students' learning strategies and techniques. Armed with this information, instructors could then design key aspects of the course to facilitate learning not only for those students who are more likely to need greater direction to function successfully in online teaching settings but also for those students who excel in such contexts. In short, key aspects of the course material could be simplified and more extensively directive for some students while other elements of course content could be designed in more challenging and less directive ways.

Next, I address some specific strategies that online instructors can use to target students' specific learning styles. Some researchers (Busato et al. 1998; Sankaran & Bui, 2001; Sankaran et al. 2001) have suggested that students who tend to use undirected learning strategies often have difficulties processing information in online contexts. To enable them to perform more effectively, instructors could provide them with more detailed learning objectives and step-by-step instructions for assignments. Additionally, these students should be directed to areas on the website where they can review course materials and sample questions. These kinds of directive components can increase undirected learners' interaction with the course material. In turn, that improved interaction can enhance learning. Some students need much less direction and support when navigating online course materials.

Students who are able to use either deep or surface level strategies tend to need much less direction than their undirected counterparts. Thus, for these students instructors would do well to provide opportunities on the website for greater self-direction and initiative taking. For example, Schwartzman and Tuttle (2002) suggested that instructors give students the opportunity to earn course credit for finding and notifying the instructor of website links that no longer work. Referring to these non-working links as "link rot", these authors asserted that link-patrol activities accomplish three things. Most importantly, it encourages students to be very familiar with the website which leads them to more effectively process course content. In turn, processing course content enhances learning. The second and third reasons are inter-related. Fixing non-working links improves the website. When students identify non-working web links, the instructor is then free to devote his or her time to other activities that can increase online interaction. Schwartzman and Tuttle (2002) also suggested learning can be enhanced via the use of online discussions.

Another way that online instructors can enhance learning for deep and surface level learners is to closely monitor these students' contributions to online discussion forums. Specifically, after completion of each online discussion forum, the instructor can select and group responses according to Christopher, Thomas & Tallent-Runnels (2004) modified version of Bloom's (1994) Taxonomy of Learning. These authors suggested that low levels of learning take place when students exhibit knowledge and comprehension. Moderate levels of learning take place when students can analyze and apply what they have learned. Finally, high levels of learning take place when students can synthesize and evaluate course material. Thus, to facilitate moderate to high levels of learning for deep and surface level learners, instructors should encourage these students to post comments that demonstrate analysis, application synthesis and evaluation of course material. A secondary benefit of incorporating these higher levels of learning to the main discussion forum for the class is that all students can have access to them. That means that the learning of undirected students too may be enhanced (Guzdial & Carroll, 2002).

In order for instructors to achieve the smooth integration of diverse learning styles into the design of their online courses, they must meet three critical criteria. First, instructors must have the requisite time to develop complex websites. Second, instructors must have access to technological resources, including software, hardware and support staff to enable development of comprehensive content (Kubala, 1998). Finally, instructors must effectively yet transparently balance the seemingly opposing aims of developing course content that is simultaneously supportive and directive yet appropriately challenging. Under these conditions, online instructors can integrate students' learning styles. In turn, this integration can provide an important mechanism for tying learning to interaction since, to date, that link has been problematic.

Discussion, Implications and Conclusion

The Internet and World Wide Web are a natural fit for teaching in the business classroom (Ragothaman & Hoadley, 1997). In particular, both tools facilitate the use of business cases, cooperative learning projects, curriculum development, electronic guest lectures and the use of email to interact with fellow students and instructors. In terms of business cases, students and instructors from around the world can be linked via the web to form virtual groups. Case work can be completed using only internet tools and resources. Although some socialization can and does take place, this particular use of technology and teaching functions particularly well when students are more task-oriented and socialization is not emphasized. Cooperative learning, another important pedagogical emphasis of business course work, is also facilitated by the use of the internet and the world wide web. Specifically, online instructors can design course projects where teams of students are assigned to work with each other and their instructors across several boundaries including time, geography, technology and culture. Such exposure is absolutely critical to success in so-called "real world" business contexts.

Electronic guest lectures also contribute to realistic educational experiences. Direct contact with invited lecturers can enhance students' application, evaluation and synthesis of course materials. Further, according to Ragothaman & Headley (1997) when guest lectures are interspersed with messages from the instructor and other students, greater stimulation of thought occurs. Clearly, when greater thoughts processes are engaged, both learning and interaction are enhanced. As for curriculum development, the Internet increases access to a wider range of instructional resources for teaching and for research. Importantly, access to one site typically leads to access to other sites. This reiterative process builds on itself to form an important tool for (a) enlarging the perspectives presented; (b) widening the scope of information shared; (c) presenting new and different pedagogical insights for improved instruction and (d) enhancing and encouraging students to more fully participate in their own learning. There are, therefore, several implications of online instruction for teaching business communication.

After reviewing the literature regarding the implications of the lack of interaction inherent in most online/distance education courses, the objective of this paper was to propose strategies for increasing interaction in these instructional contexts. To that end, I proposed the use of threaded online discussions, the formation of small groups and the integration of students' learning styles and strategies into online course design. Research suggests that threaded online discussions make it relatively easy for learners to participate. Specifically, when threaded discussions are used, learners are free to devote more cognitive resources to posting and processing comments because they don't have to first organize and contextualize existing remarks (Tello, 2004). Additionally, when threaded online discussions are posted to the main discussion forum, all learners have access to the information. Finally, Guzdial and Carroll (2004) have suggested reading these comments enhances learning for all students even when some students don't post their own comments. This is particularly useful for undirected learners who have difficulty selecting and processing critical information.

The use of small groups was also proposed. This strategy increases interaction in two ways. First, it addresses students' needs for social presence. Often, small group members establish a group identity. That group identity facilitates cohesion. In turn, cohesion serves to meet individual members' needs for social presence and/or immediacy. Secondly, the use of small groups promotes interaction because of the nature of collaborative or cooperative assignments. Interaction is an inherent by-product of working together as a group to accomplish course-related assignments, and projects. Finally, because most studies on interaction and online or distance education fail to link increased interaction to learning, I suggested integrating students' learning styles and strategies into online course design. Using a learning styles inventory such as Myers-Briggs, instructors could have students identify the learning strategies that they tend to use. Then, armed with that information, instructors could design various components of the online course to better align with these varying learning strategies.

Online instruction fits nicely with the typical course content in most business communication courses and with what Shelton, Lane & Waldhart (1999) pointed out is a growing national trend towards the use of technology in communication instruction. For example, online threaded discussions can involve a variety of guests who do not have to be physically present to present material to learners. Additionally, such instruction gives teachers access to a wide variety of tools to enhance pedagogy, curriculum and overall instruction. Work in small group contexts gives students the opportunity to deal with diverse populations, technology and of course, complex problem solving. Finally, the integration of learning strategies can help instructors address the increasingly wide range of student abilities that present themselves in one context for learning.

Interaction should not be eclipsed in favor of an exclusive focus on economies of scale. Yet, as resources in higher education continue to decline, it is imperative that we find ways to capitalize on the reduced costs of online and/or distance education while simultaneously maximizing interaction in these contexts. Increased interaction not only leads to teacher and learner overall satisfaction with online instruction but also enhances learning performance. Threaded discussions, small groups for student learning and integration of student learning styles into course design are three broad strategies that not only emphasize interaction but also simultaneously minimize costs and enhance learning. As all three strategies are well-suited to the business communication core curriculum, their use seems particularly warranted in these instructional contexts. It is paramount that we reap the full benefit of technology in educational contexts but we cannot do so at the expense of interactivity.

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