Assessing Online Education: Applying Principles from the Learning Communities Movement to Internet Learning

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Abstract: As funding sources (e.g., governing boards and non-profit foundations) continue pressing for accountability, higher education administrators require tools for evaluating the quality of campus programs. One innovative initiative, Learning Communities, has proven successful in confronting the challenges associated with attrition and retention. Since these are problems also associated with online distance education, applicable principles from the Learning Communities movement are used to develop a framework for evaluating online courses. These principles have application in helping students overcome the sense of isolation and remoteness reportedly felt when taking online courses. The authors of this study surveyed attendees of a recent Learning Communities conference to reveal the best of what this inventive enterprise has to offer for Internet learning and assessment.

“If Learning Community principles were to be used in online classes, an effort to create a community culture would be most necessary. It is hard to believe such a community would or could be as successful (in more traditional understandings of what a Learning Community is) as a face-to-face learning community. It would seem that a tremendous amount of instructor planning and ongoing coordination would be necessary. Merely planning ‘group projects’ (which often feel artificial and mandated to students) would not be adequate in themselves. Electronic problems could particularly vex the development of a virtual Learning Community—still—it is a worthy endeavor, and pragmatically-speaking, one that should be pursued in an age in which distance education is taking a front row seat in curriculum development.”

This quote comes directly from a survey participant in this study and helps illustrate the paradoxical nature of the issues investigated. Can principles from the Learning Communities movement be used to assess and improve the new "virtual" classroom—a computerized version of the traditional brick-and-mortar classroom? As the quote indicates, initiatives for improving college teaching and learning often require professor/student or student/student interaction in a traditional, on-campus course setting. However, many colleges and universities today have a growth strategy that puts a priority on the use of information technology to deliver instruction. This deliberative emphasis is in response to changes in how, when, and where people learn. Despite the conundrum of face-to-face versus electronic contact, advances in computing and communications have the potential to change higher education in new ways that we are only beginning to understand.

We often hear that online education shows promise for setting the collegiate learning experience free from the confines of the lecture hall. However, along with this new found freedom comes the requisite growing pains and problems. For example, drop
rates for courses delivered via the Internet are higher than average (Diaz, 2002). Although they vary from institution to institution, and program to program, attrition rates are typically ten percentage points higher in online courses than those of their on-campus counterparts (Carr, 2000). Data from the Dallas Community College District exposed “an 11 to 15 percentage-point difference between course-completion rates in the district’s on-campus courses and those in its distance education courses” (Carr, 2000, p. A39). Another study, from the online MBA program at Texas A&M, showed attrition rates of 21 percent for online courses compared with 14 percent for traditional courses (Terry, 2001).

In an era of declining resources and renewed interest in accountability of higher education, high attrition rates are troublesome (Ewell, 1990; Banta, 1993; Burke, 2002). Senior management on campus, including distance education administrators, tend to talk of online distance education programs in terms of exponential increases in headcount and the incessant demand for more courses (Green, 2002). The emphasis is on growth and meeting demand, with less attention paid to what is going on in the online classroom (Berge, 1998).

The Need for Determining Online Course Effectiveness

This paper reports the preliminary findings of a study designed to determine the applicability of a number of innovative pedagogical principles for use in the online classroom. Based on the findings, the authors propose a pilot framework for assessing an online course. “Virtual” universities and global competition are forcing many higher education institutions forward into online distance education in order to stay relevant in an Information Age economy (Kirp, 2003). As college and university leaders scramble to find their niche in this market, less pressing concerns about evaluation, assessment, and quality are likely of secondary importance in a list of priorities.

Using the principles of New Accountability, by focusing on outputs and not inputs, colleges and universities can strive to ensure that students receive a high quality learning experience. Quality is defined here as demonstrating both that college instruction has impact on learning and that faculty use continuous improvement strategies to improve instruction (Welsh & Metcalf, 2003). Consensus exists that traces the problem of attrition in online learning to the old-fashioned correspondence model of distance learning (Privateer, 1999). The correspondence learner is an isolated learner, working at his own pace with infrequent contact with the instructor (Foshay, 2002). Small (1999) suggests that distance students “bemoan the lack of frequent, face-to-face contact with faculty” (p. 36). Gunawardena and Zittle (1997) reported that the support promoted by a unified group of learners is critical in distance learning. While research specifically examining attrition problems in the Internet classroom is scarce, this deficiency only represents one missing piece of a larger absence of reliable research about online distance education in general. Tu and Corry (2002) noted: “Few conceptual frameworks have been developed regarding this new learning environment” (p. 208).

Nevertheless, several well-known and dependable general frameworks, such as the Seven Principles for Good Practice in Undergraduate Education (Chickering & Gamson, 1987), Tinto’s (1975) model for understanding the process of student withdrawal from the conventional campus setting, or Boyer’s (1995a) Community for Learning, provide both a good starting point and have application regardless of mode of
educational delivery. However, the most useful approach for reducing attrition in the online classroom may ultimately be found in an innovative endeavor known as Learning Communities.

**The Wisdom of Learning Communities**

The Learning Communities movement is a well-established educational enterprise focused on designing programs that ensure incoming freshman do not “fall through the cracks” and drop out of school because of the negative experiences sometimes associated with the first year of college (Upcraft & Gardner, 1989; Tinto, 1995; MacGregor, et al., 1999; Smith, 2001). The original basis for Learning Communities involved the deliberate organizing of a curriculum through linking or clustering courses for a cohort of students (Gabelnick, et al., 1990). Today, these inventive programs have grown to include additional elements, such as an interdisciplinary approach to the curriculum (e.g., blending history and literature courses), team-teaching pedagogical techniques, extracurricular initiatives with a community service focus, and residence hall/living community components. Learning Communities have been shown to help ameliorate attrition and reduce drop out rates (Cross, 1998).

Indeed, the literature supports the notion that students feel valued and encouraged to participate when a course is structured so that both the professor and other students show interest, share insights, and express ideas (Bruffee, 1993; Harasim, et. al, 1995; Dede, 1996). In the few studies that do examine the dynamics of an online course, results point to a student's sense of isolation and remoteness as significant barriers to learning via the Internet (Everhart, 1999; Haythornthwaite et al., 2000; Conrad, 2002). Consequently, for faculty teaching via the Internet, striving to create community in the “virtual” classroom should strengthen the bond between students taking the course and make the course material more interesting.

The implication here is that faculty could improve poor attrition rates by building a Learning Community within their online course. Perhaps this is easier said than done however. Few if any good measures exist to gauge whether or not important elements of community are present in an online course.

**A Study of Learning Community Principles and Online Education**

Determining the applicability of certain pedagogical principles, associated with Learning Communities, for use in online teaching and learning is the purpose for the study. The survey sample was generated from a list of attendees of the 8th Annual Conference on Learning Communities and Collaboration: Student Learning and Engagement, held in November 2003. These 245 higher education faculty, administrators, and researchers are the leaders of the contemporary Learning Communities movement.

Survey questions about Learning Community principles were developed from the literature. Participants were asked via email survey to respond to statements about the applicability of each of eight (8) principles to online course delivery. These principles are:

- **Clustering two online classes around an interdisciplinary theme.**
- **Using group projects to promote collaborative learning.**
- Integrating an extra-curricular, student affairs component into the online class (i.e. social activity).
- Encouraging students to take responsibility for their own learning.
- Using instructor-guided peer questioning to encourage student-to-student interaction.
- Incorporating reflective writing exercises, including student self-evaluation.
- Encourage students to share their own experiences and ideas in online discussions and/or postings.
- Instructor sharing own internal processes (ways of thinking) with students.

A copy of the survey is available in Appendix A. Participants were offered the option to complete the survey online, with the web address link available in the email (Dillman, 2000). Forty-four (44) responses were collected. Our goal here was to both collect information and gain insight from leaders in the Learning Communities movement about the best of what their programs have to offer for the world of Internet learning. We hoped to develop an evaluative framework from the data; such a framework could be invaluable for studying online higher education.

Qualitative comments from survey participants were requested for each of the Learning Community principles (Dillman, 2000). The authors conducted a content analysis of the responses associated with each of the eight principles, as well as general comments about Learning Communities and online learning (Manning & Cullum-Swan, 1994). Pattern-coded responses were then categorized into themes to support the emerging framework and help operationalize the constructs that were identified in the study (Miles & Huberman, 1984). Additionally, respondents were asked to rate the applicability of each principle on a one-to-four Likert scale, with one representing low applicability and four representing high applicability.

Results
Mean scores representing the applicability of each Learning Community principle are given in Table 1. Statement seven, the principle “Encourage students to share their own experiences and ideas in online discussions and/or postings,” scored highest on the one-to-four Likert scale (µ = 3.55), followed closely by statement four, “Encourage students to take responsibility for their own learning (µ = 3.54),” and statement six, “Incorporate reflective writing exercises, including student self-evaluation (µ = 3.50).”

Table 1 also shows that the Learning Community principles described in survey statement one, “Cluster two online classes around an interdisciplinary theme (µ = 3.00),” and statement three, “Integrate an extra-curricular, student affairs component into the online class (µ = 2.90),” scored lowest. In fact, using a statistical comparison of means with Tukey follow-up, the mean score for statement one was significantly lower than the means for both statements seven and four (p < .05), and mean for statement three was significantly lower than the means for statements seven, four, and six (p < .05). Please note also that statement three, “Integrate an extra-curricular, student affairs component into the online class,” had the most variability of all the Learning Community principles: nearly 35% higher (sd = 1.042) than the average for the rest (sd = 0.777), suggesting the least agreement about this principle (Integrating a extra-curricular component) among respondents.
Table 1. Survey results: Mean applicability scores for Learning for Learning Community principles.

<table>
<thead>
<tr>
<th>Learning Community Principle</th>
<th>Mean Applicability Score (4.0 scale)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q7. Encourage students to share their own experiences and ideas in online discussions and/or postings.</td>
<td>3.55 (sd=0.73) (n=44)</td>
</tr>
<tr>
<td>Q4. Encourage students to take responsibility for their own learning.</td>
<td>3.54 (sd=0.75) (n=41)</td>
</tr>
<tr>
<td>Q6. Incorporate reflective writing exercises, including student self-evaluation.</td>
<td>3.50 (sd=0.67) (n=44)</td>
</tr>
<tr>
<td>Q5. Use instructor-guided peer questioning to encourage student-to-student interaction.</td>
<td>3.43 (sd=0.59) (n=44)</td>
</tr>
<tr>
<td>Q2. Use group projects to promote collaborative learning.</td>
<td>3.41 (sd=0.82) (n=44)</td>
</tr>
<tr>
<td>Q8. Instructor shares own internal processes (ways of thinking) with students.</td>
<td>3.41 (sd=0.76) (n=44)</td>
</tr>
<tr>
<td>Q1. Cluster two online classes around an interdisciplinary theme.</td>
<td>3.00 (sd=0.99) (n=44)</td>
</tr>
<tr>
<td>Q3. Integrate an extra-curricular, student affairs component into the online class (i.e. social activity).</td>
<td>2.91 (sd=1.04) (n=43)</td>
</tr>
</tbody>
</table>

Participants were also asked in the survey to rank order the top three most applicable principles from the list of eight as they apply to online teaching and learning. Results of these rankings are given in Table 2. Table 3 presents exploratory factor analysis results for the LC principles / survey questions. We use factor analysis here to help establish correlative connections between complex sets of data (Kline, 1994). In this case, the complex data set includes multiple statements across the many survey participants. Correlative results from the analysis show how groups of survey statements “cluster” together. A one-word indicator, or element, is then selected that best characterizes a common theme for each group of clustered statements. Factor analysis from this pilot survey yielded three elements: Connections, Experience, and Responsibility (C-E-R). It is important to note that when conducting factor analysis, in order to overcome the “problem of equivalence of factors rotated” (Kline, 1994, p. 76), both a sample size of 100 or more is desirable and a two-to-one ratio of sample subjects to variables should be maintained. While the subjects-to-variables ratio is achieved here, the low sample size (n=44) confirms this research as a pilot study. Total variance explained by the C-E-R elements was 67 percent.
Table 2. Results from rankings of most applicable Learning Community principles.

<table>
<thead>
<tr>
<th>Summary Rankings (1st+2nd+3rd)</th>
<th>( n ) (freq)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Q2. Use group projects to promote collaborative learning.</td>
<td>24</td>
</tr>
<tr>
<td>(2) Q7. Encourage students to share their own experiences and ideas in online discussions and/or postings.</td>
<td>22</td>
</tr>
<tr>
<td>(3) Q4. Encourage students to take responsibility for their own learning.</td>
<td>18</td>
</tr>
<tr>
<td>(4) Q6. Incorporate reflective writing exercises, including student self-evaluation.</td>
<td>17</td>
</tr>
<tr>
<td>(5) Q1. Cluster two online classes around an interdisciplinary theme.</td>
<td>16</td>
</tr>
<tr>
<td>(6) Q5. Use instructor-guided peer questioning to encourage student-to-student interaction.</td>
<td>14</td>
</tr>
<tr>
<td>(7) Q3. Integrate an extra-curricular, student affairs component into the online class (i.e. social activity).</td>
<td>11</td>
</tr>
<tr>
<td>(8) Q8. Instructor shares own internal processes (ways of thinking) with students.</td>
<td>10</td>
</tr>
</tbody>
</table>

Table 3. Exploratory factor analysis results for Learning Communities principles.

Pilot Survey, \( N = 44 \)

Factor analysis component matrix (Varimax rotation).

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Connections</th>
<th>Experience</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1. Cluster two online classes around an interdisciplinary theme.</td>
<td>0.745</td>
<td>-0.071</td>
<td>-0.148</td>
</tr>
<tr>
<td>Q2. Use group projects to promote collaborative learning.</td>
<td>0.757</td>
<td>-0.037</td>
<td>0.216</td>
</tr>
<tr>
<td>Q3. Integrate an extra-curricular, student affairs component into the online class (i.e. social activity).</td>
<td>-0.093</td>
<td>0.759</td>
<td>-0.230</td>
</tr>
<tr>
<td>Q7. Encourage students to share their own experiences and ideas in online discussions and/or postings.</td>
<td>-0.05</td>
<td>0.833</td>
<td>0.177</td>
</tr>
<tr>
<td>Q4. Encourage students to take responsibility for their own learning.</td>
<td>0.114</td>
<td>-0.021</td>
<td>0.829</td>
</tr>
<tr>
<td>Q6. Incorporate reflective writing exercises, including student self-evaluation.</td>
<td>-0.066</td>
<td>-0.020</td>
<td>0.888</td>
</tr>
</tbody>
</table>

Q5 and Q8 did not factor
Discussion

Scrutiny of online higher learning is increasing. For example, at a United States House of Representatives subcommittee meeting in 2003 where reauthorization of the Higher Education Act was being deliberated, several legislators called for “more federal supervision over distance-education programs” (Carnevale, 2003, p. A33). Also, according to one accrediting body, the Middle States Commission on Higher Education, if an institution offers "at least 50% of a program through distance learning, it must receive advance approval from the Commission to have those programs included within the scope of the institution's accreditation" (MSCHE, 2002, p. 1).

The good news is that the phenomenon of online learning is at least partially responsible for opening a “new discourse of accountability that stresses ‘clients,’ ‘service,’ and ‘delivery services’ as the new metaphors” (Burbules & Callister, 2000, p. 272). Concerns continue to surface however about whether students receive equal or better educational quality via the Internet (Simonson, 1997). A body of knowledge speaking to this issue is now only emerging (Maeroff, 2003). Without consistent support from administrators and faculty leaders, the future of quality in learning via the Internet may suffer; the pseudo-revolution of online higher education risks being viewed as just another failed experiment or “fad” (Birnbaum, 2000).

So while senior campus administrators are busy touting input-type accountability measures for their distance education ventures—such as exploding growth in enrollments, programs, and degrees offered online—contemporary issues associated with outcomes and quality of outcomes are seldom mentioned. Drop rate and attrition studies mentioned earlier, from both the Dallas Community College District and the Texas A&M online MBA program, are examples of the undesirable difference for online versus on-campus courses (Carr, 2000; Terry, 2001).

Developing a Diagnostic Tool

Results from this pilot study reveal a three-element, Connections-Experience-Responsibility (C-E-R) framework, based in the principles from Learning Communities. Ideas associated with the pilot C-E-R framework point toward the creation of an Online Learning Community, in which participants communicate regularly and develop connections. Table 4 suggests three statements, for both students and faculty, for each of the elements of the pilot C-E-R framework. The ideas contained in these statements may help overcome barriers to a successful online learning experience and perhaps reduce attrition.

The first element, Connections, describes a critical ingredient for a successful Online Learning Community: students should feel a connection to each other and to the course material. The idea of Connections is also a classic principle of traditional Learning Communities. Gabelnick, et al. (1990) wrote extensively on Learning Communities and described this phenomenon as "students and faculty members (recognizing) courses or disciplines as complementary and connected" (p. 19). Boyer (1995b) saw value in this suggestion when quoting education theorist Mark Van Doren, who wrote more than fifty years ago: "The connectedness of things is what the educator contemplates to the limit of his capacity. The student who can begin early in his life to think of things as connected... has begun a life of learning" (p. 26). Conversely, Haythornthwaite, et al. (2000) showed
Table 4. Ideas supporting the C-E-R framework for both students and faculty engaged in an online course.

<table>
<thead>
<tr>
<th>Connections</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Students:</strong></td>
<td></td>
</tr>
<tr>
<td>1. Actively engage in group assignments.</td>
<td></td>
</tr>
<tr>
<td>2. Work to see the common themes across courses.</td>
<td></td>
</tr>
<tr>
<td>3. Seek to help other students.</td>
<td></td>
</tr>
<tr>
<td><strong>Faculty:</strong></td>
<td></td>
</tr>
<tr>
<td>1. Coordinate, design, and plan with other faculty across disciplines.</td>
<td></td>
</tr>
<tr>
<td>2. Help guide group projects and supervise progress.</td>
<td></td>
</tr>
<tr>
<td>3. Emphasize commonalities between clustered courses.</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Experience</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Students:</strong></td>
<td></td>
</tr>
<tr>
<td>1. Share their experience, knowledge, and inspiration with others.</td>
<td></td>
</tr>
<tr>
<td>2. Participate in scheduled extra-curricular activity.</td>
<td></td>
</tr>
<tr>
<td>3. React, respond, and critique others’ ideas in discussion postings.</td>
<td></td>
</tr>
<tr>
<td><strong>Faculty:</strong></td>
<td></td>
</tr>
<tr>
<td>1. Design extra-curricular activity for students.</td>
<td></td>
</tr>
<tr>
<td>2. Ask students to share ideas and experiences.</td>
<td></td>
</tr>
<tr>
<td>3. Incorporate real-world application into the curriculum.</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Responsibility</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Students:</strong></td>
<td></td>
</tr>
<tr>
<td>1. View themselves as responsible and self-motivated learners.</td>
<td></td>
</tr>
<tr>
<td>2. Engage in reflective writing and self-evaluation.</td>
<td></td>
</tr>
<tr>
<td>3. Communicate regularly with the instructor.</td>
<td></td>
</tr>
<tr>
<td><strong>Faculty:</strong></td>
<td></td>
</tr>
<tr>
<td>1. Provide a model for expectations and responsible learning behavior.</td>
<td></td>
</tr>
<tr>
<td>2. Reward self-evaluative exercises such as reflective writing.</td>
<td></td>
</tr>
<tr>
<td>3. Encourage self-motivation and student-led exercises.</td>
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</tr>
</tbody>
</table>
that “those (students) who fail to make such connections feel isolated and more stressed than those who are more active in the community” (p. 1).

One key to making Connections work is careful planning and coordination among faculty teaching in the effort connected or clustered classes, across disciplines. One survey respondent characterized the coordination issue this way:

“You have to be quite intentional about clustering: the designers of the two courses should consult each other at the very least. If students see overt connections (that don’t contradict or confuse) there’s more of a likelihood to continue on in both subjects.”

Another respondent concurs and sees the effort to create Connections as a worthy endeavor:

“This should improve retention in both classes (across disciplines) since the faculty have co-designed their courses and the students have peer relationships in both courses. This may spawn online learning clusters among those with similar learning skills. This should be suggested and encouraged by faculty.”

The second element, Experience, has roots in classical educational theory. Dewey (1938) proposed that the instruction of “subject-matter of facts or information and of ideas… (was) satisfied only as the educator views teaching and learning as a continuous process of reconstruction of experience” (LW 13:59). The possibility of incorporating Experience into the online learning context is intriguing, but mixing new technologies with old pedagogies simply won't do: "meaningful change (will occur) by redesigning instructional technology in terms of being both a strategic and cognitive tool" (Privateer, 1999, p. 67). Moreover, faculty may need instructional design and technical support for these Web-based initiatives. Spence (2001) suggests "we won't meet the needs for more and better higher education until professors become designers of learning experiences and not teachers." (p. 18).

An example of Experience in an online course could include “meeting” students at the home page of a famous art museum’s Web site and then “entering” as a group for a virtual tour. A chat room window remains open while the instructor guides students through the museum, thus allowing for discussion about art, artists, and history. This would certainly qualify as a novel extra-curricular Learning Community activity! However, “virtual” activities are still a new idea and, as an alternate, one survey respondent attempts to incorporate a traditional campus-affiliated activity in his online course:

“This is tough in online learning since one of the key advantages is flexibility with regard to time to engage the course during a day. I have offered field trips for online classes and have never gotten beyond 20% (attendance) because of scheduling and the reality that many students are geographically remote.”
The third element, *Responsibility*, refers to self-motivation and maturity, students being accountable for their own learning, and empowered to learn in a manner that is best for them. One survey respondent suggested that “learning contracts” —where student and professor agree to expectations for the online course in writing—might be useful. Nevertheless, there needs to be the offer of help and consistent assistance from the professor. According to Chickering and Ehrmann (1996), frequent instructor-student contact is the preeminent factor in student engagement, motivation, and involvement. As one respondent commented:

“There needs to be support, however, for students asking the instructors questions. What might serve this best would be online discussion.”

Another way to encourage *Responsibility* in the Internet course may be through reflective writing exercises. Here, deeper learning is achieved as students going beyond simply acquiring information. They make sense of what is learned and move toward the “internalization” of concepts and ideas, though reflective writing (Monteith & Smith, 2001). One respondent speaks highly of the pedagogical value of reflective writing:

“Reflection will not be diminished online and as the online context is written, it should enhance written reflection if students guided to understand reflections vs. response in the online mode.”

An interesting complimentary advantage for using reflective writing in an Online Learning Community is that it qualifies nicely as an alternative assessment method. Such alternative methods for assessing outcomes are gaining favor in higher education (Banta, 2002). The next step in this project is to increase the number of respondents to the initial survey in order to substantiate the initial factor analysis. If the initial factor analysis holds, the second step will be to test the proposed C-E-R assessment tool.

**Conclusion**

Higher education today faces unprecedented technological challenges due to the dizzying pace of advances in information technology. These advances are revealing creative and exciting new ways for colleges and universities to address the educational needs of learners. As institutions make available new options for learning, such as online distance education, the emphasis should be on quality, not commoditization. Despite pressure from non-traditional providers of postsecondary education, online higher learning must fit neatly into an institution’s own values and compliment its mission.

Columbia Teachers College President Arthur Levine likens the phenomenon of online learning to the G.I. Bill in terms of its impact on higher education. In an op-ed piece published in the New York Times, he predicted that information technology could one day make traditional brick-and-mortar universities obsolete (Levine, 2000). Levine also gives an ominous warning about this trend: “My big fear is that we will provide personal, highly interactive campuses for those who can afford them, and the rest will be given virtual higher education” (Press, et al., 2001, p.37).

While it is true that more good measures are needed to assess whether or not an online course meet the test for quality, no doubt these will come in time. The time has
ended for institutions to continue evaluating their online offerings in more than terms of skyrocketing enrollments and explosive growth in course and program offerings. As online teaching and learning further establishes itself as a legitimate tool for the delivery of higher education, problems such as drop rates and student dissatisfaction will surely increase if the focus does not shift to an emphasis on quality.

Using the Internet to promulgate higher education should have a positive “democratizing” effect on students, attracting a wide variety of students from diverse background (Johnson, 2003). The lack of geographic boundaries will make more courses and programs available for more students, including those in rural areas. This medium for learning has huge potential for both frequency and quality of student collaboration and communication, but a shift in focus from growth to quality is essential. Innovative pedagogical strategies, such as the formation of an Online Learning Community, can help meet the quality challenge.

References


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Middle States Commission on Higher Education (MSCHE). (2002). *Distance learning programs: interregional guidelines for electronically offered degree and certificate


# Appendix A - Survey

Our group is conducting research about learning communities and online distance education. Specifically, we are interested in finding out if principles associated with "live" on-campus learning communities can be used to reduce attrition in online classes. Please take a moment to consider the EIGHT (8) ideas listed below. Your feedback is greatly appreciated... thank you for your assistance in this project!

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UNLV - Higher Education Leadership  
702-895-1224 office / 702-895-3492 fax

Below is a list of ideas generally associated with learning communities. Please consider each for applicability in online teaching and learning to reduce attrition. Please comment in the space provided.

<table>
<thead>
<tr>
<th>Little Applicability</th>
<th>High Applicability</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>(2) (3) (4)</td>
</tr>
</tbody>
</table>

### 1. Cluster two online classes around an interdisciplinary theme.

- [ ] Little Applicability
- [ ] High Applicability

Comment?

### 2. Use group projects to promote collaborative learning.

- [ ] Little Applicability
- [ ] High Applicability

Comment?

### 3. Integrate an extra-curricular, student affairs component into the online class (i.e. social activity).

- [ ] Little Applicability
- [ ] High Applicability

Comment?

### 4. Encourage students to take responsibility for their own learning.

- [ ] Little Applicability
- [ ] High Applicability

Comment?

### 5. Use instructor-guided peer questioning to encourage student-to-student interaction.

- [ ] Little Applicability
- [ ] High Applicability

Comment?

### 6. Incorporate reflective writing exercises, including student self-evaluation.

- [ ] Little Applicability
- [ ] High Applicability

Comment?

### 7. Encourage students to share their own experiences and ideas in online discussions and/or postings.

- [ ] Little Applicability
- [ ] High Applicability

Comment?

### 8. Instructor shares own internal processes (ways of thinking) with students.

- [ ] Little Applicability
- [ ] High Applicability

Comment?

### 9. From the list above, please rank order your TOP THREE most applicable; (example: 4-3-5)

(please rank order your TOP THREE)