

An Investigation of Education-Based Virtual Communities: Developing and Assessing Online MBA Programs

James W. Peltier

University of Wisconsin-Whitewater

John A. Schibrowsky

University of Nevada-Las Vegas

William Drago

University of Wisconsin-Whitewater

The paradigm shift in the management of customer relationships initiated by the development of the Internet has forever changed how buyers and sellers interact in the global market place (Peltier et al., 2002). Although e-commerce is still in its early developmental stage, marketers are beginning to recognize that the Internet is not merely a new channel of distribution or another mode of communication. It also represents a transition to a new business model requiring a different set of relationship-oriented activities (Deighton, 1997; Wind and Rangaswamy, 2001). Many e-marketers are designing community infrastructures for the purpose of strengthening two types of interactive relationships: customer-to-provider and customer-to-customer (Hagel and Armstrong, 1997; McWilliam, 2000). Termed “virtual communities,” the core benefit of these interactive infrastructures is that they provide a computer-mediated meeting place where customers can pursue common goals and interests (Bressler and Grantham, 2000; Rheingold, 1993).

The e-commerce industry is not alone in its goal to understand how virtual communities can be used to enhance interactive relationships and share of customers. Globally, institutions of higher learning are beginning to explore teaching technologies and infrastructures that utilize the unique and collaborative capabilities of the Internet (Lang and Zhao, 2000). It is estimated that nearly half of all U.S. colleges and universities provide some type of Internet-based educational offerings; serving nearly 2 million students in the U.S. in 2002, with growth estimates as high as 5 million by 2006 (Wechsler, 2002).

Unfortunately, little is understood on how to best develop, deliver, and assess interactive web-based courses (Kaynama and Keesling, 2000; Sweeney and Ingram, 2001). Because of the importance of treating students as customers (Haynes, 2000), conceptual and empirical research is needed to find ways to enhance the online educational experience of this important target audience (Eastman and Swift, 2001; Lee, 2002). In the research presented here we provide insight into the types of interactive relationships online education consumers are seeking in their pursuit of knowledge. While the research focus in this study was on improving the quality of online MBA programs, the ideas presented are transferable to a broader educational experience and also have relevance to understanding e-marketing relationships as well. Attention is given to understanding the role that virtual communities play in enhancing student-to-instructor and student-to-student relationships, and to the types of information content, course structure, and delivery systems that consumers desire in the relationship.

A review of the distance education, virtual communities, and teaching effectiveness literature pointed to at least six possible dimensions of teaching effectiveness in an online educational setting: (1) student-to-student interactions, (2) student-to-instructor interactions, (3) instructor support and mentoring, (4) information delivery technology, (5) course content, and (6) course structure. Our model posited that each of these factors is positively related to perceptions of the overall quality of the online learning experience for graduate business education. Each of these dimensions is discussed below.

A study was conducted in conjunction with a large Midwestern University with a nationally ranked

online MBA program. The university was interested in identifying the key dimensions associated with enhancing the online MBA experience. As part of this process, the business college surveyed current online MBA students pertaining to their experiences. This particular setting was ideal for studying virtual communities. Since much of the graduate education experience deals with interacting with teachers and other students to build “communities of learning,” the online education experience needed to make sure that “virtual communities of learning ” were present.

To determine the relative importance of the six measures of online education in students’ evaluation of the effectiveness of the online educational experience, a regression analysis was performed. Due to the potentially high multicollinearity between the measures, factor scores from the principle components analysis discussed above were used as the independent variables. The three-item measure of students’ evaluation of the effectiveness of the online educational experience was used as the dependent variable. To determine the relative importance of the individual items a stepwise regression was conducted.

Table 1 displays the results of the regression analysis. All six dimensions were included in the model. The order of the importance of the variables in explaining the variance in students’ evaluation of the overall effectiveness of the online educational experience during the course was as follows:

1. Course content
2. Instructor support and mentoring
3. Course structure
4. Information delivery technology
5. Student-to-student interaction
6. Student-instructor interactions

The model accounted for 72% of the variance in the dependent variable.

This study presents a number of important findings for online educators and others interested in developing and evaluating virtual communities. Six dimensions of online learning virtual communities were identified. Measures of each of the dimensions were developed and purified. Finally, the relative importance of the dimensions in accounting for the variance in students’ perceptions of the effectiveness of the online experience was reported.

This paper represents an important first step in providing greater insight into the effective development and use of virtual learning communities through online education. It also provides insights into the effective management of virtual communities in the business world and how they can be used to build communication networks with and between customers, motivate purchases, increase participation, and strengthen relationships. It is hoped that the results of this study may aid practitioners in more fully utilizing this new educational and business model. It is also hoped that the results of this study will motivate others to continue to seek greater understanding of virtual communities.

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Table 1
Stepwise Regression Analysis

Variable	Coefficient	Standard Error	T-value	Significance
Constant	6.582	.106	61.822	.000
Course Content	1.942	.107	18.205	.000
Instructor support and mentoring	1.523	.107	14.281	.000
Course Structure	.888	.107	8.330	.000
Information delivery technology	.731	.107	6.852	.000
Student to Student Interactions	.671	.107	6.292	.000
Instructor - Student Interaction	.346	.107	3.246	.001

R = .849 R² = .720 Adjusted R² = .714

Dependent Variable = Effectiveness of the Online Educational Experience