Journal of Marketing Education

http://jmd.sagepub.com

Connecting in Megaclasses: The Netnographic Advantage

Norman J. O'Reilly, Ryan Rahinel, Mary K. Foster and Mark Patterson

Journal of Marketing Education 2007; 29; 69
DOI: 10.1177/0273475307299583

The online version of this article can be found at:
http://jmd.sagepub.com/cgi/content/abstract/29/1/69

Published by:
SAGE Publications
http://www.sagepublications.com

On behalf of:
Marketing Educators Association

Connecting in Megaclasses: The Netnographic Advantage

Norman J. O'Reilly, Ryan Rahinel, Mary K. Foster, and Mark Patterson

Large universities are increasingly offering marketing courses in classes of 300 or more students. Without access to the usual verbal and nonverbal cues, instructors in these megaclasses are disadvantaged in terms of their ability to respond to learners' needs. As a result, marketing instructors have supplemented course infrastructure with technology to encourage communication. In seeking to better understand such communication, this study positions netnography as a marketing research technique that provides incremental advantages over other pedagogical methods through its support and enhancement of student learning. The authors provide specific recommendations for the adoption of netnography to marketing educators teaching megaclasses.

Keywords: *megaclasses; online, forums; large classes; netnography; communication; marketing education*

INTRODUCTION

A major theme in marketing education research involves the evaluation of pedagogical tools and techniques in the context of their ability to enhance learning (Hay, Hodgkinson, Peltier, & Drago, 2004; Hay, Peltier, & Drago, 2004; Karns, 2005; Kaynama & Keesling, 2000), including research on techniques to increase professor-teacher interaction (e.g., Karns, 2005). Ultimately, the purpose of these studies is to enhance student learning above and beyond that which is provided by current practice. The importance of this area of research is amplified by the fact that postsecondary marketing education is now commonly taught in large classes where students can be anonymous and communication difficult (Wulf, Nyquist, & Abbott, 1987).

The anonymous and communication-challenged environment of the large class has led to increased attention on the use of information technology to assist in reducing the administrative challenges associated with large class teaching (Hodson, Saunders, & Stubbs, 2002; Priluck, 2004; Wong, Wong, & Yeung, 2001). The literature has identified the development of a learning community as a potential solution to overcoming this challenge, with communication (i.e., transfer of information) and connection (e.g., between professor and student) being essential (Cohen & Prusak, 2001). The marketing education literature provides a number of tactics and tools that marketing educators can adopt to create a learning community in a large class environment, including a course Web site, group work, student presentations, peer evaluations, and evaluation schemes (Karns, 2005; L. J. Smith, 2001; Peltier, Drago, & Schibrowsky, 2003). The objective of this research is to continue these efforts by assessing netnography as a tool to improve connectivity in large class environments.

Netnography is a contemporary qualitative research methodology that has been cultivated in the marketing literature

Norman J. O'Reilly is director and associate professor of the School of Sports Administration in the Faculty of Management at Laurentian University. He is also director of the Institute of Sport Marketing at Laurentian University. He has published widely in the marketing literature and has strong interests in marketing education research, including student engagement in large classes and the relationship between admission standards and academic performance.

Ryan Rahinel is a research associate in the Management Education Research Institute, Faculty of Business, Ryerson University. His management education research include the role of admission standards in university education and learning theory. He has also published in the area of sport and technology and won a top student paper award at a Canadian social marketing conference. He is currently completing his undergraduate degree in information technology management at Ryerson University.

Mary K. Foster is the chair of marketing, the MBA director, and the director of the Management Education Research Institute in the Faculty of Business at Ryerson University. Her management education research interests include large class teaching, learning theory, and leadership development. In addition, she has conducted research and published in the areas of women in management and the nonprofit sector. She has a BA and MA from the University of Toronto and an MPhil and PhD from Columbia University.

Mark Patterson is research coordinator, Management Education Research Institute, and academic support coordinator, MBA program, Faculty of Business at Ryerson University. His research interests include student engagement and large class teaching environments.

Journal of Marketing Education, Vol. 29 No. 1, April 2007 69-84
DOI: 10.1177/0273475307299583

as an appropriate method to assess and understand online cultures (Kozinets, 1997, 1998, 1999, 2002). Netnography is proposed here for the following seven reasons: (a) Qualitative research is appropriate to assess large class student-to-student interaction, (b) ethnography—the parent of netnography—is useful to aid teacher understanding of large student groups, (c) quantitative research methods do not tell the whole story in large classes, (d) very large classes provide limited opportunities for communication, (e) hybrid courses will become more common, (f) previous studies have noted the capability of online forums to provide insights for application to pedagogy (Foster, 2004; Lim & Cheah, 2003), and (g) textual discourse occurring in educational forums are posited to be different from the discourse in market-oriented forums where the suitability of netnography has been previously established. Thus, in suggesting netnography to mitigate the large class challenge, this study seeks to establish netnography as a means to uncover student needs and wants through the assessment of online communication, with particular emphasis on uncovering elements that provide an advantage over and above that which might be elicited through other pedagogical methods. These "netno-advantages" would provide large class marketing educators with the impetus to adopt netnography as a tool for course improvement.

BACKGROUND AND LITERATURE REVIEW

Class Size, Learning, and Technology

Many North American universities are experiencing increased class sizes as a result of both internal (e.g., flat-line resources) and external (e.g., higher interest in postsecondary education) factors. The pressure to increase class size is expected to continue given that the peak of the North American "baby boom echo" generation was born in 1990 and will be of university age in 2008 (Foot, 2001). Concerns have been raised about the quality of education in large classes because of the well-documented relationship between interaction and active learning and the fact that interaction is normally more problematic in large classes (Hunt, Eagle, & Kitchen, 2004; Jung, Choi, Lim, & Leem, 2002; Kaynama & Keesling, 2000; Mehlenbacher, Miller, Covington, & Larsen, 2000; Palincsar, 1998; Vygotsky, 1978; Wallace, 2003). These research findings lead to the inference that small classes are more effective than large classes because interaction is easier within smaller groups (Cooper, 1995). Despite the intuitive logic of this inference, there are no consistent empirical results concerning the impact of class size on student performance. In fact, most studies indicate that there is no significant relationship (Drago & Peltier, 2004; Gilbert, 1995; Hill, 1998; Schech & Kinicki, 1994). This inconsistency can be partially explained by viewing learning as a multidimensional process that is affected by a variety of factors, including course content and structure, instructor support and mentoring, interaction among students, interaction between student and professor, and effective technology (Peltier et al., 2003). For example, a professor who is enthusiastic about the subject matter, knowledgeable, well organized, and concerned about students is much more likely to be identified before class size as the key contributor to positive learning outcomes (Gilbert, 1995; O'Toole, Spinelli, & Wetzel, 2000; Williams & Ceci, 1997).

A further complication in interpreting large class research is the lack of consistency in the standards used to designate a class as "large." Previous studies investigating the impact of class size have labeled widely varying numerical values as *large* (Toth, 2002). This suggests that size, at least in this context, is a subjective measure. Literature from other subject areas contends that feelings of largeness may be related to brain growth and the demands of social interaction within groups (Dunbar, 1992). Anthropologists have determined that there is a statistical relationship between the average size of the neocortex in primate species and the average size of the species' social group. For example, 3 million years ago, the capacity for social knowledge of australopithecines[1] was limited to a group comprising 67 members, due to the species' small neocortex. Currently, anthropologists believe that human beings are capable of managing social groups of 150 members (Aiello & Dunbar, 1993). Once a group size surpasses the 150-member threshold, individuals may not have the brain capacity to interact effectively without employing deliberate strategies to build social networks and organize the social environment (Homer-Dixon, 2001). Thus, some of the discrepant findings in the literature about effectiveness may be attributed in part to the differences in sample size where some exceeded 150-persons and others used test groups below this threshold. For the purposes of this research, we categorize classes with 300 or more students as *megaclasses* to differentiate them from other large class studies in the literature, where classes as small as 80 are defined as large.

Megaclass environments have received considerable attention in marketing education literature, with two relevant themes emerging: (a) that multimedia techniques to overcome the significant administrative load are necessary (Chopoorian & Karakaya, 2001; Drago & Peltier, 2004; L. W. Smith & Van Doren, 2004) and (b) that special attention should be paid to megaclasses over and above indices of performance (Guseman, 1985; Hise, Conant, & Gwinner, 1989). The implied importance of communication for a positive learning experience has its roots in organizational research. Indeed, it has been noted that large organizations want to build a corporate culture that is based on a shared vision of needs, goals, and sanctioned ways of shaping the behavior of its members to meet its vision and objectives (Chan, 1997; Ouchi, 1980; Wheatley, 1992). When successful, such a strategy creates strong feelings of community (Mayrhofer, 1998). An analogous situation exists in educational settings, where as Wegerif (1998) noted, students must feel that they are part of a community where they are respected and their voices are heard. Without such an environment, learning is reduced (Wegerif,

1998). In megaclasses, students have fewer opportunities to be heard, can be anonymous, and can feel disconnected from their peers and the professor (Wulf et al., 1987). Concurrently, megaclass teachers are unable to see the students' nonverbal cues of body language and facial expressions, which makes it difficult for them to make adjustments in their presentations or to respond to learner needs (Granitz & Greene, 2003; Mehlenbacher et al., 2000).

Some faculty members respond to the challenges of megaclass teaching by incorporating information technology (Priluck, 2004). This is evident in the widespread adoption of course management systems such as WebCT and Blackboard to handle the administrative tasks of disseminating course material, posting grades, and testing online (Hodson et al., 2002). Consequently, research on the use of technology as a pedagogical tool in large classes has focused mainly on evaluating the administrative advantages (i.e., operational efficiency) provided by the technology (Wong et al., 2001). However, for courses taught exclusively online, there is an extensive body of research that assesses teaching and learning from both social interaction and performance perspectives (Atwong & Hustad, 1997; Barrett & Lally, 1999; Conrad, 2002; Hopkins, Thomas, Meredyth, & Ewing, 2004; Matzat, 2004; Nicol, Minty, & Sinclair, 2003; Peltier et al., 2003; Preece, 2001; Sullivan, 2001; Vrasidas, Michalinos, & Chamberlain, 2004; Wallace, 2003).

It is very important to this research to note that little attention has focused on evaluating so-called hybrid courses (Brown, 2001; Granitz & Greene, 2003)—courses with both a face-to-face and online component—despite the increased use of online formats to supplement traditional classroom teaching (Drago, Peltier, & Sorenson, 2002; Hay, Hodgkinson, et al., 2004). It is expected that hybrid courses will continue to rise in popularity as online offerings adopt video conference technology as part of their structure, enabling a face-to-face component in these courses.

Online Forums

A common tool used in online and hybrid courses is the online forum. Online forums, or discussion boards, are essentially electronic versions of "town forums" and are typically centered on a product, service, or lifestyle (Kozinets, 2002). According to Kozinets (1999), the online forum has emerged as the most widely used tool to facilitate the creation of online communities. These forums possess many of the advantages of print media forums in that communication occurs asynchronously and in a many-to-many fashion (Klein, 1999). Furthermore, online forums are less expensive than print media forums because the author of each respective post creates the forum content and the audience views it electronically, which eliminates the shipping and reproduction costs of traditional publishing processes.

Typically, an online forum is organized around a main page that organizes discourse (through hyperlinks) into subtopics where members may read, create, and reply to conversational *threads* (Granitz & Ward, 1996; Moloney, Dietrich, Strickland, & Myerburg, 2003). *Netizens* (a term used to describe online individuals) are encouraged to participate in these threads of conversation even when they are not necessarily directed toward them (Granitz & Ward, 1996). This differs from traditional face-to-face conversation where eavesdropping and interruptions are considered rude and are not culturally sanctioned (Granitz & Ward, 1996). It is also considered appropriate for a large number of netizens to restrict their activity to the passive reading of conversational threads (Kozinets, 1998). The online forum enables influential and informative one-to-many communication to extend through indefinite amounts of time and space.

As an educational activity however, the effectiveness of online discussion has been called into question. In Karns's (2005) study of student perceptions of learning activities, online discussion ranked a dismal 20th out of 21 activities in perceived effectiveness. This suggests that students see little value from their online discussions either directly through interaction with peers and administration or indirectly through the use of textual evidence for class improvement. Amid this, students feel that student-to-student and professor-to-student interaction are important in courses containing online components (Peltier et al., 2003). This perhaps supports our assertion that discussion boards harbor a wealth of potential provided that they can be used effectively in facilitating student-to-student and professor-to-student relationships.

Netnography

Kozinets (1997, 1998, 1999, 2002) first recognized the potential of these convenient and data-rich online forums to provide incremental insight for commercial marketers. Thus, an online version of ethnography as a construct to aid in the harvesting and analysis of such data was proposed. Ethnography (cf. ethnographic content analysis) refers to the description of people and their culture (Schwartz & Jacobs, 1979) and primarily describes what actors are doing socially as opposed to what they are thinking or how they are communicating (Jonsson & Macintosh, 1997). As a research protocol, it is independent of the specific subject matter (Altheide, 1987).

The online evolution of ethnography, *netnography*, was first defined by Kozinets (1997) as the "written account of on-line cyberculture, informed by the methods of cultural anthropology" (p. 3). It is essentially a modern version of ethnography adapted to the study of online communities and culture that is faster, simpler, and less expensive than focus groups and less intrusive than ethnography (Kozinets, 2002). An additional advantage of netnography over ethnography is the ability for a researcher to return to the original qualitative data set at any point during the analysis phase because the data set is inherently transcribed. Netnography

TABLE 1
NETNOGRAPHY IN THE LITERATURE

Netnography	*Purpose*
"Advertainment or Adcreep? What Game Players Think About Product Placement in Computer Games" (Nelson, Keum, & Yaros, 2004)	Mass media adoption of netnography as a valid research protocol has begun. As an example, this recent study to investigate gamers' beliefs was widely distributed in online media.
"Exploring Cross-Cultural Ambivalence: A Netnography of Intercultural Wedding Message Boards" (Nelson & Otnes, 2005)	This article discusses the roles of the virtual community in wedding planning and identifies coping strategies that brides employ in managing the cross-cultural ambivalence that emerges as they reconcile two or more sets of cultural norms and traditions.
"New Consumers and Football Fandom: The Role of Social Habitus in Consumer Behaviour" (Richardson, 2005)	This article uses netnographic methodologies to discover football fan culture and record apparent patterns in fan behavior.
"The Social Form of Napster: Cultivating the Paradox of Consumer Emancipation" (Giesler & Pohlmann, 2003)	"In this exploratory netnographic analysis of Napster consumption meanings, researchers analyzed 80 cyber-interviews, 52 emails, 70 homepages and 80 entries on message boards to map micro-emancipatory consumption discourse and practices and build an understanding of the moderato social processes that construct Napster as an emancipative consumption community" (p. 94).
"The Field Behind the Screen: Using Netnography for Marketing Research in Online Communities" (Kozinets, 2002)	"As an illustrative example, the author provides a netnography of an online coffee newsgroup and discusses its marketing implications" (p. 61).
"E-Tribalized Marketing?: The Strategic Implications of Virtual Communities of Consumption" (Kozinets, 1999)	The author uses netnography to "guide our understanding of four distinct member types . . . this approach allows much more subtlety in targeting and approach" (p. 255).
"On Netnography: Initial Reflections on Consumer Research Investigations of Cyberculture" (Kozinets, 1998)	"Most of this paper will be taken up with explications of netnographic field research methods as they have been developed 'on-line' in 'real-time'" (p. 366).
"'I want to believe': A Netnography of the X-Philes' Subculture of Consumption" (Kozinets, 1997)	"Data collection by the sole author took place in three venues over a seven-month period that began in August 1995" (p. 470).

as a methodology is essentially and necessarily multimethod, possibly including projective techniques, content analysis, historical analysis, semiotic analysis, and a host of others in addition to traditional observational and participative methods (Kozinets, in press). In this article, content analysis and observational methods were selected based on the strengths of researchers and consistency with previous literature dealing with netnography (see Table 1). The use of netnography has grown in researcher and practitioner circles (Giesler & Pohlmann, 2003; Kozinets, 1997, 1998, 1999, 2002; Nelson, Keum, & Yaros, 2004; Nelson & Otnes, 2005; Richardson, 2005). Table 1 summarizes the articles contributing to its conceptual development and its subsequent applications in reverse chronological order.

The studies described in Table 1 confirm the prevalence of netnography as a suitable methodology to uncover pretexts and norms in several environments. The current research however represents its first application in an educational setting.

RESEARCH FOCUS

The literature reviewed suggests that learning in megaclasses is enhanced by interaction and that such interaction can be enhanced through the use of information harvested from online forums using netnography. Thus, it is suggested that netnography can play an important role in enhancing the megaclass education experience via improved learning. Building on this, the purpose of this research is to support empirically this claim by gaining insight into netnography's role in aiding the megaclass marketing educator above and beyond the benefits provided by other pedagogical tools in creating an improved overall learning environment. A preliminary step involves the adaptation of Kozinets's netnography methodology to an educational setting.

METHODOLOGY

This research was conducted at a predominantly undergraduate, medium-sized, urban university. Introductory marketing is a required course for all business students and for some students in other faculties. It was taught in a megaclass format with 746 and 726 students in the 2004 and 2005 fall semesters, respectively. Each week the students had a 2-hour lecture in a fully equipped university theatre. In addition, teaching assistants managed smaller (20 to 50 student) 1-hour mandatory tutorial sessions throughout the week. The course pedagogy focused on "active learning" and included individual presentations, group work, conceptual

TABLE 2
ADAPTING KOZINETS (2002) TO AN EDUCATION NETNOMETHODOLOGY

Kozinets (2002) Methodology	*Education Netnomethodology*
Cultural entrée -Develop specific research questions; Identify appropriate online forums -Obtain knowledge about forum and users through observation	Community "forumation" -Forum designed and implemented by course management team prior to data collection -Data drives research direction and questions
Data collection and analysis -Sample of posts; two types: (a) Research inscribed and (b) directly copied -Classified posts as social, informational, on topic, and off topic (to research question) -Four member types (user segmentation) a. Tourists: Low consumptive, low social interaction b. Minglers: Low consumptive, high social interaction c. Devotees: High consumptive, low social interaction d. Insiders: High consumptive, high social interaction	Data collection and analysis -Knowledge obtained from observation -Census of postings plus class survey -Classified all posts as administrative, feedback, relational, transformational, student knowledge sharing, and course content related -Four member types (user segmentation) a. Slackers and observers: Low course interest, low relational interest b. Chatters: Low course interest, high relational interest c. Keeners: High course interest, low relational interest d. Leaders: High course interest, high in relational interest
Providing trustworthy interpretation -Triangulation -Long-term immersion in community	Providing trustworthy interpretation -Generalizations made within class population only -Assumption of general homogeneity of populations from course to course -Student population represents the mainstream consumer -Interpretation augmented by additional round of member checks
Research ethics Four recommended procedures: -Fully disclosed researcher presence -Confidentiality and anonymity ensured -Community member feedback included -Obtained permission to quote postings	Forum ground rules established Informing students (extended from community "forumation" step): -Students well informed/trained -Moderators/administrators clearly identified -Forum as research tool announced regularly -Confidentiality among members ensured through naming convention
Member checks -A process where some or all of the findings are presented to members for additional insight, feedback, and information exchange	Member checks -Contact the top 10 posters for feedback -Additional 10 random member checks carried out in final steps of revision process

(not memory-based) examinations, and significant mark allocations for in-class quizzes and tutorial exercises that encouraged active participation.

An online discussion board was developed for the course based on a simple user interface and overall functionality that could be adapted to meet the technological, organizational, and personal requirements as outlined by Kellog (1999). Unlike some of its synchronous alternatives, the discussion board had a user-friendly graphical interface, did not require keyboard proficiency for participation, and included easy-to-use emoticons (Walther & D'Addario, 2001). Teaching assistants functioned as forum moderators whose duties included encouraging knowledge sharing and ensuring a level of forum decorum as well as the administrative responsibility of technical maintenance. In addition to the discussion board, the course technology included e-mail interaction with the professor and teaching assistants, the use of the Blackboard online course management system, in-class music, in-class videos, and PowerPoint presentations. Students were offered an in-class training session on the purpose of the forum where it was made clear that participation was entirely voluntary and would have no impact on course grades. In 2004, 611 students registered for the forum and 118 posted at least once. In 2005, 562 students registered and 179 posted at least once.

Education Netnomethodology Development

In understanding the barriers to data interpretation that are inherent in analyzing the large amounts of qualitative data that result from member interaction in online forums, Kozinets (1999, 2002) proposed a methodology that encourages rigorous ethical standards, the use of member checks, and multiple methods of data verification (triangulation) to ensure valid analysis. His five-step methodology for netnography (see Table 2) is adapted here for use in an education

setting. We term this an *education netnomethodology*, which is outlined in the right column of Table 2.

As noted in Table 2, the first step for Kozinets is the "cultural entrée" in which specific research questions are developed and knowledge is obtained about the forum and the users through observation. This step is not applicable for the educational adaptation because the community does exist before the course and once the course begins, the professor is already a member of the community. Instead, we focus on a "community forumation" that encouraged student use by setting ground rules in terms of basic norms and expectations, ensuring confidentiality and anonymity through a unique naming convention, observing community development through the norming phase, encouraging the development of clans/social units to disseminate norms, and encouraging use of and interaction through timely administrative feedback. This also fills the requisites of Kozinets's research ethics guidelines for netnography, which he described in the fourth step of his methodology.

The second step of Kozinets's framework involves data collection and analysis. Kozinets (2002) noted that two sources of data are available to the researcher(s)—postings downloaded from the online forum and self-authored descriptive field notes to contextualize the data. Because the researchers were familiar with the language of the educational setting and well versed with basic Internet jargon (e.g., LOL translates into laugh out loud), field notes were minimal, which is a supported practice according to Kozinets. The adapted netnomethodology follows from Kozinets's recommendations, so students were mapped based on their social ties to the community and level of consumption interest.

Kozinets's (2002) social posting category was used as a proxy for social ties to the community and included posts that were relational, transformational, and student knowledge sharing. Relational refers to posts between students that were not course related but involved student-to-student interaction (e.g., "Anyone interested in forming an intramural volleyball team? You must be experienced because I want to win! I've played many years in public and all 4 years in high school . . . Anyways, leave a message."). Transformational posts involve students seeking to change the behavior of other students, for example:

> I was reading some of the feedback about the presentations and I would have to disagree with most of them. Truth is, marketing is more than knowing your Ps, it's also the ability to know how to communicate well. It's fortunate that there is a teacher who is out there to challenge each of us and help us realize where improvement is needed. When you get out in the real world, no matter what job you do you will have to sell ideas or practices into your organization, and often this happens right on the spot. While this class assignment was positioned differently, take the feedback you get from the teacher and TA [teacher assistant] and build from it. It's truly the only way we all learn.

A student knowledge-sharing post is when students provide course-related information to others (e.g., "I'm not a TA or Prof, but. . . . Yes, it's on the second floor of [the building]. There are signs on the wall that point you to the 'Upper Gym,' follow those.").

Kozinets's (2002) informational posting category was used as a proxy for consumptive interest and expanded to include posts that were administrative, feedback, and course content related. Administrative posts were defined as communications, typically involving a TA or the professor, where issues of course organization were discussed (e.g., "To TA's and Prof: I just wanted to verify if the GYM location for SECTION 015 is located on the 2nd or 3rd floor of [the building]. Please reply me as soon as possible, thankz."). Feedback posts were defined as students providing feedback on course issues to the professor or TAs, for example:

> FORUM IS GOOD! I totally dig this forum!! It is really nicely organized into material questions, feedback, social needs etc. so you don't have all the different questions compiled into the same board. I think this was an awesome idea!!

Posts related to course content refer to questions directly related to a concept or theory included in the lectures or textbook (e.g., "I am confused about the external factors of the SWOT analysis, I was looking in the appendix in the textbook, and they used the PEST for their external. IS this correct? Could we do this on the exam?").

In a similar fashion to Kozinets (2002) and as Figure 1 indicates, users were grouped based on their posting frequency to both social and informational threads on the course forum and identified as slackers and observers, chatters, keeners, or leaders. Students with at least one social and one informational post are categorized as leaders because they are involved in aspects of the forum that demonstrate leadership from an education point of view: sharing information with classmates, building community through social postings, and trying to shape opinion and behavior through transformational postings. The slackers and observers segment includes only those who never posted to the site with the only difference between the two subsegments being that slackers never registered on the forum, whereas observers registered and viewed other postings but never posted themselves. Chatters are those who posted in the social category only, and keeners are those who posted in the informational category only.

A caveat is required here to explicate the meaning of such groupings because these differ superficially from the tourists, minglers, insiders, and devotees identified by Kozinets. Because our segmentation was generated using data from the online forum as a proxy for measurement, the terms *leaders*, *keeners*, *chatters*, *slackers*, and *observers* cannot be generalized beyond the online context. For example, chatters may be highly social on the forum and be quite reserved during the lecture, whereas disruptive students during tutorials

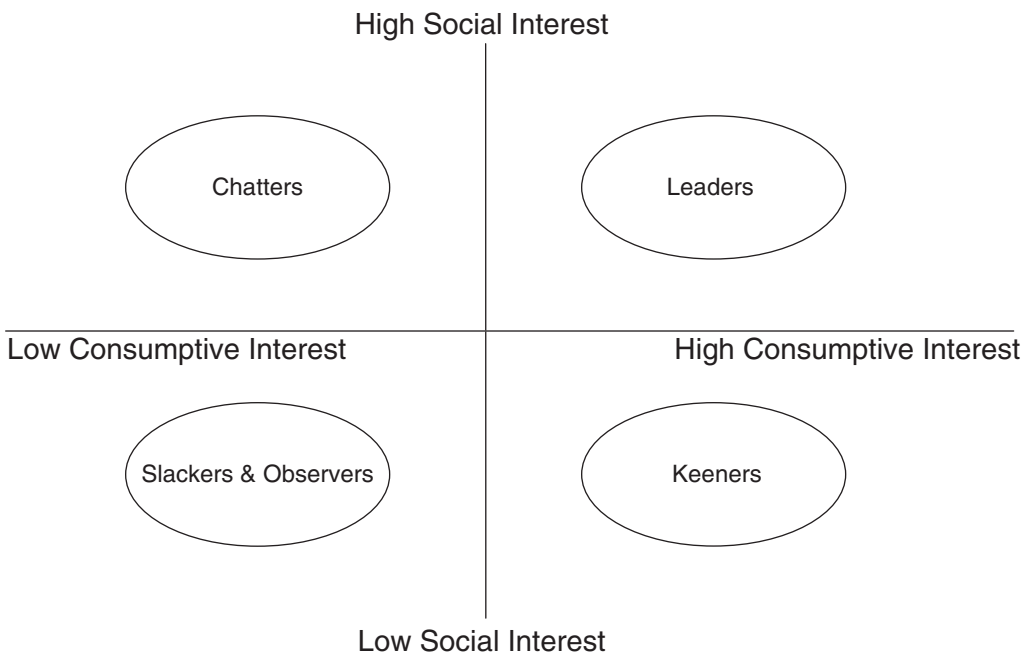

FIGURE 1: Forum User Segmentation

may merely be observers in the online forum. It is also notable that the usage of these posting and user categories is consistent with the recommendation by Kozinets (in press) that regardless of method, data should be analyzed in the communal context in which it exists rather than with an eye to generalize findings beyond such environments or groups.

Kozinets's (2002) third step involves verification through triangulation and immersion in the community. This step was not applicable to our research situation because students from year to year were posited to be fairly homogenous in terms of their needs.

Finally, Kozinets (2002) employed member checks, a process whereby some or all of the findings are presented to members of the community for additional insight, feedback, and information exchange. The value of such a process is heightened in an educational netnography where the short and fixed lifetime of an educational forum limits opportunities for the corroboration of findings. Thus, two rounds of 10 member checks each were conducted. The first round took place immediately after the content analysis. The results of the content analysis were supported by the first round of member checks. The second round was completed during the revision process of the netnographic stories (see the Qualitative Analysis section), where students were presented with each of the three stories and prompted for feedback on the validity of our interpretations of subtexts, pretexts, motivations, and norms. Later in this article, results are reported in conjunction with the netnographic stories.

This adapted netnographic method for an education setting was implemented in both 2004 and 2005. Students registered for the online forum using a pseudonym of their choice to provide anonymity for participants. Two researchers reviewed and analyzed the threads from the forum for issues, examples, and situations that provided insight into connecting in the megaclass. Data were coded for the segmentation analysis in an Excel spreadsheet, linked and merged with individual grade assessments, and finally inserted into a Microsoft Access database for analysis. Differences of opinion were resolved through third party consultation, discussion, review, and reanalysis. Ultimately, two netnographic stories were chosen in light of results from the member checks. To further demonstrate the applicability of netnography, a third netnographic story from a discussion forum in a second marketing course has also been included. The additional forum was part of an upper-year, undergraduate course in marketing research. It is a required course for marketing majors and marketing minors. In 2005, 376 students were registered in the course. The format of the course is similar to the introductory marketing course in that students have a 2-hour lecture followed by a 1-hour tutorial each week.

RESULTS

Use of Online Forum and Segmentation

As Table 3 outlines, in 2004 there were 16,675 views on 594 separate postings or an average of 28 views per posting.

TABLE 3
USE OF ONLINE FORUM: 2004 AND 2005

Year	Total Posts	Total Views	Average Views Per Post
2004	594	16,675	28
2005	983	49,548	50

NOTE: Numbers of total posts referred to in Table 3 include professor, teacher assistant, and student posts.

In 2005 there were 49,548 views on 983 separate postings or an average of 50 views per posting.

This increase in postings and viewings may be attributed to four factors. First, in 2005 we improved communication about the forum. Second, unlike our set-up in 2004, one highly skilled[2] TA was dedicated to forum management, which resulted in the forums being ready at the beginning of the term instead of 3 weeks into the start of classes. Third, the head TA was much more involved in 2005 (276 posts) than in 2004 (50 posts), which may have meant that students were more likely to refer to the forum because postings were perceived as more important. Finally, a portion of increased postings may be attributed to the better organized and expanded forum categories based on discussion of 2004 results, enabling more efficient forum navigation. Because there are no comparative data with other courses of the same size, it is difficult to evaluate whether the activity outlined in Table 3 represents a low, medium, or high level of activity given that these students were in their first semester, their first megaclass, and possessed varying levels of technological ability. Some clear findings however are generated. Figures 2 and 3 reveal that in both years there were discernible spikes in forum activity following the deployment of an online survey (worth 2% of the final grade) and just prior to examinations and the case study (2005 only), demonstrating that value (perceived, at least) is generated by the forum.

Our assessment of the nature of the posts provides insight into the ability of an online forum to facilitate the development of ties between students. As Table 4 reveals, 15% of posts in 2004 involved general discussion (non-marketing-related) posts comprising 11% of total views, which suggests that for a segment of the class, the online forum provides a mechanism for social and non-course-related connections between students. The pattern for 2005 is different, in part because the categories had changed. Notably, in 2005 the large numbers of posts (23%) and views (29%) were related to the case study, which was new to the course. This perhaps suggests that case studies are a good pedagogical tool to encourage forum participation and in turn, student engagement.

In segmenting the population of students who made at least one post in 2004 and 2005, Table 5 demonstrates that those in the leader group made the majority of posts (68%) and that their contributions spanned the full range of topics. The chatters had the smallest number of posts (2%) and only in the relational category. In the middle, with 30% of the posts, were the keeners who focused on ensuring that they understood the requirements of the course rather than contributing to the development of social ties within the class.

An additional argument supporting the use of forums is the relationship between posting and course performance. As Table 6 shows, both participation marks[3] and the average final grade of each of the leader and keener user groups are significantly higher than the grades of the students who did not post.[4] Furthermore, leaders also perform better than keeners ($t = 2.779$, $p < .01$) and chatters ($t = 1.691$, $p < .1$) on final grades.

A deeper analysis of the slacker/observer group shows that observers (i.e., those who actually registered for the forum but did not post) had significantly higher participation marks ($t = 3.752$, $p < .001$) and final marks ($t = 4.821$, $p < .001$) than slackers (i.e., those who never registered for the forum). These highly significant results indicate that even passive participation in the forum may be helpful to student engagement and ultimately, student performance. Furthermore, students who post student knowledge-sharing posts were found to have significantly higher participation grades ($t = 6.293$, $p < .001$) than those who made posts in the other content areas.

QUALITATIVE ANALYSIS

Following the quantitative analysis and preliminary member checks, three stories were selected from a thorough assessment of all posts to provide a deeper understanding of connecting in the megaclasses.

Story 1: Disdain and Disengage—The Grammar Case

This situation is an example of transformational posts that attempt to change the attitudes and behavior of classmates. It reveals the existence of strong class norms that not only discourage challenging the professor but also ostracize a student who chooses this strategy to gain status in the class. A student ("Jackie" hereafter) created a thread on the forum titled "GRAMMAR! AAAAHH!" The initial posting read as follows:

> I don't know if it's just me, but shouldn't a university professor present a powerpoint presentation free of grammatical and spelling errors? I suppose I should have spoken up sooner, ie. the survey, however, as [the professor] was going through the results, I was in utter shock. My favourite was "the prof talks to fast." The prof talks to fast what? Maybe I'm being unreasonable, but that is definitely not the only error I've noticed in the classes. Maybe I should edit the presentations prior to the lecture (wink). At least then maybe our generation would know how to write and speak properly.

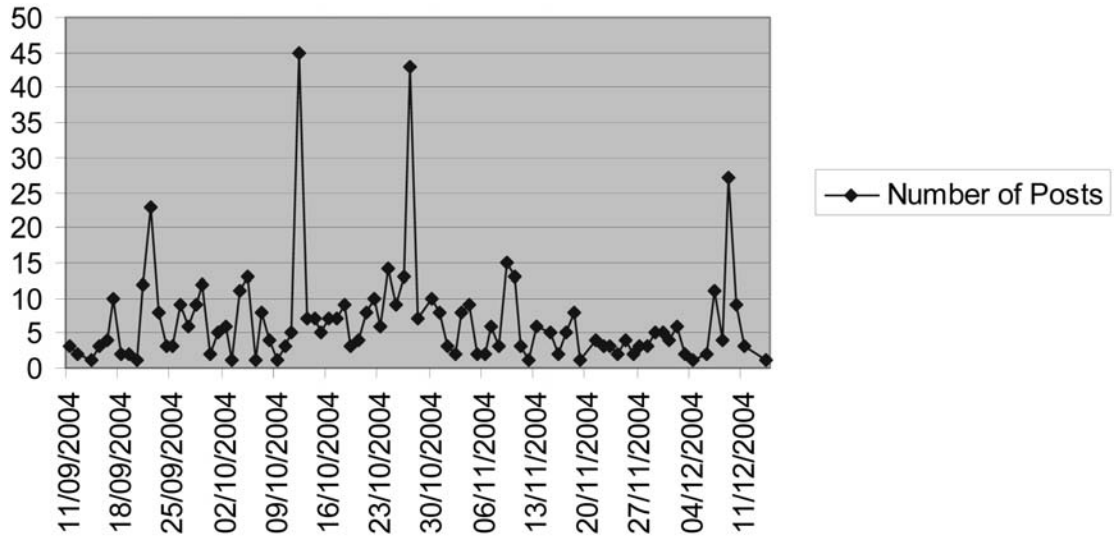

FIGURE 2: Daily Posting Activity 2004

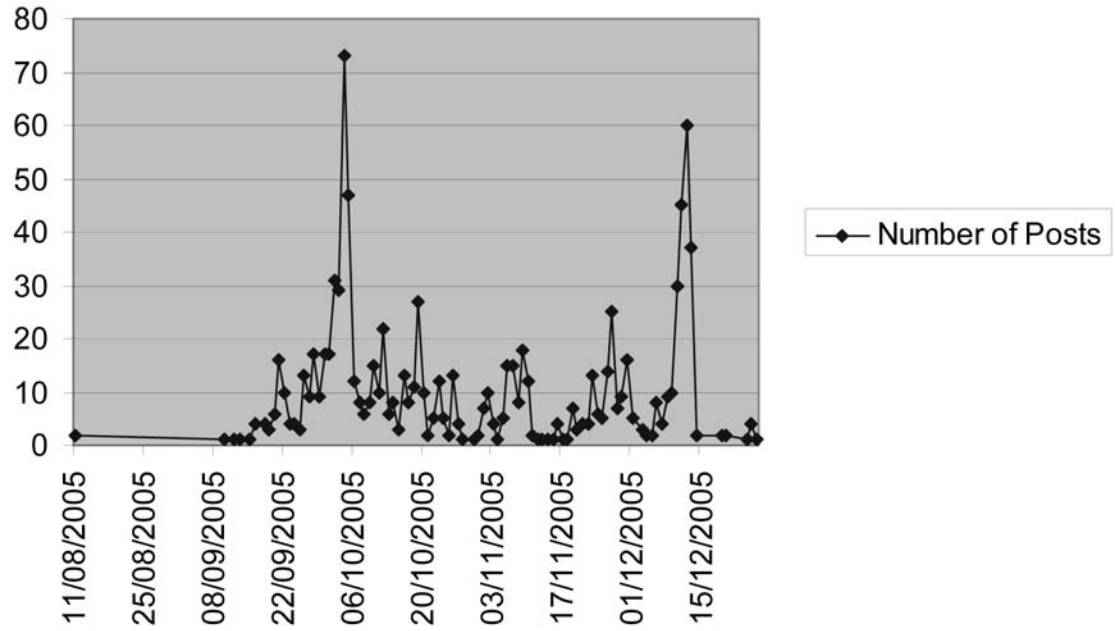

FIGURE 3: Daily Posting Activity 2005

The appeal is characterized by the following four distinct themes: (a) that student grammar from the surveys was substandard and indicative of an underlying generational problem; (b) that the professor was not only liable for presenting such errors in grammar to the class but in doing so, contributed to the underlying problem in (a); (c) that Jackie's grammar is superior; and (d) that her comments stemmed from altruistic motives.

Although superficially, the themes appear simple, a quick analysis of Jackie's forum history reveals some potential motives. Jackie had posted only once previously, 15 days prior. The content was administrative and happened to be the terminal post on a highly viewed thread (161 views spread over three posts—approximately 54 views/post vs. the forumwide 28 views/post). Clearly, Jackie had not been a heavy participant in

TABLE 4
TYPE OF POSTS ON ONLINE FORUM: 2004 AND 2005

	Posts		Views	
Forum Section	N	%	N	%
2004				
Student feedback form	94	16	3,607	22
General feedback	51	9	1,621	10
Announcements	31	5	1,312	8
Course material	228	38	6,065	36
Course management	82	14	1,599	10
General marketing discussion	18	3	690	4
General discussion (non-marketing-related)	90	15	1,781	11
Total	594	100	16,675	100
2005				
Announcements	2	< 1	387	1
Case study discussion	225	23	14,594	29
Continuing education	6	1	371	1
Comments	76	8	2,511	5
Course administration	17	2	323	1
Final exam	198	20	9,047	18
Jobs	2	< 1	359	1
Marketing plan assignment	178	18	7,394	15
Midterm questions	95	10	5,592	11
Off topic	53	5	1,123	2
Pop quizzes	10	1	527	1
Registration information	1	1	662	1
Shotgun discussion	120	12	6,658	13
Total	983	100	49,548	100

TABLE 5
TYPE OF STUDENT POST BY USER SEGMENT: 2004 AND 2005 COMBINED

Type of Post	*Chatters % (n = 23 posts)*	*Keeners % (n = 280 posts)*	*Leaders % (n = 640 posts)*
Administrative	—	49	20
Course content	—	38	19
Feedback	—	13	10
Relational	100	—	27
Knowledge	—	—	20
Transformational	—	—	4

NOTE: The data in Table 5 include summary information for 2004 and 2005 combined in all cells.

TABLE 6
NUMBER OF POSTS AND AVERAGE GRADE FOR EACH SEGMENT: 2004 AND 2005 COMBINED

	Slacker/ Observer	*Chatter*	*Keener*	*Leader*
Number of students in segment	1,157	16	151	101
Number of posts in total	0	23	280	229
Average posts per student	0	1.4	1.9	6.3
Average participation mark (%)[a]	68.1	71.9	76.5	81.2
Participation compared to nonposters[b]	N/A	$t = 0.994$ $p = .336$	$t = 5.573$[b] $p < .001$	$t = 10.978$ $p < .001$
Average final grade (%)	65.9	67.3	69.3	71.6
Final grades compared to nonposters	N/A	$t = .595$ $p = .552$	$t = 4.295$[b] $p < .001$	$t = 6.051$[b] $p < .001$

a. As measured by marks in tutorials and pop quizzes.
b. Notes significance.

forum interaction and hence may have felt disconnected from other forum members. The previous contribution represented her strategy for making connections and gaining status with other students by presenting herself as a grammar expert who will figuratively "save the next generation" by editing the professor's slides before the lecture. In this regard, Jackie is able to satisfy her seemingly dual and interdependent motives of tie building with colleagues and gaining status on the forum through criticism of the community's leader (in this case, the professor).

Jackie's implied goal of attention seeking was met almost immediately by both students and TAs who responded to her post. Most of these replies suggested that Jackie had misinterpreted the slide because the professor had simply presented a compilation of transcribed student replies. A TA reiterated this theme in the following post:

> What happened was that he copied/pasted the first post on the topic word-for-word, and then tabulated all the other ones that conveyed the same general idea. If the first post had a mistake, then the power point had a mistake.

A post from another student dismissed the criticism altogether, arguing that the grammar mistake, whether warranted or not, was "small and insignificant." This exchange provides insight into communication in the megaclass. First, it shows that students use the forum to try to distinguish themselves from the group in some way, much as students do in smaller classes through the quality and/or quantity of their contributions to class discussions. The forum provides a similar opportunity for students to stand out. Second, it suggests that in a large class it is a risky strategy to stand out by challenging the professor. Given the size of the class, the bonds between the student and the professor may be stronger than the ties between students. In this case, students felt compelled to defend the professor and remind Jackie that she should be "glad that he offer's powerpoints[;] most prof's don't."

Interestingly, Jackie seems oblivious to the fact that she has violated a course norm in that her criticism of the professor persists. She counters with the following post: "I just think those powerpoints should be free of errors, even if that means taking the extra time to edit them. That's what a teacher does." She suggests that the professor has neglected his professional duties as evidenced by this oversight, thereby reinforcing theme (b) from her initial post.

This last post became the tipping point for the class. The head TA entered the animated discussion when he posted a message supporting the argument that the comments had been copied from the students' responses and explaining that the professor had "spent over 7 hours the night before reading and compiling the data. [The professor] stayed up till 5:00 AM to make sure the students received the data in a timely manner." Furthermore, the head TA tried to broaden the discussion and make it less personal when he asked, "Do you feel MSN, text, messaging and peoples reliance on word processing programs have contributed to this? Anyone have any thoughts?"

The professor attempts to stop any further escalation by accepting responsibility for the errors and acknowledging the significance of Jackie's observation.

> Hi [Jackie]
>
> First, I want to thank you for assessing my slides so closely, it is much appreciated. Second, I should point out that the quotes were taken directly from the posts as provided by your colleagues. That is proper research practice, as changing them could alter the meaning as intended by the writer. I do, however, note your point clearly and in the future, any such quotes will be put in quotations if presented to class.
>
> Thanks again for your attention to detail!
>
> [signed by the professor].

In Jackie's next posting, she retreats:

> I didn't mean to be difficult . . . I'm just one of those people who always pays attention to that kind of stuff. I was not aware of the proper researching practices when dealing with direct quotations. Thank you for informing me of this, [the professor] and [the other TA], as I will now know that in the future. Do not take it personally, I am one of those annoying people who corrects you as you are speaking! (smile) Thanks again for the clarification.

Although previous research indicates that in an online forum the role of the instructor changes from being an authority figure to someone who facilitates and moderates the discussion (Drago et al., 2002; Peltier et al., 2003), Jackie seems to respond to the professor's posting in a respectful and even subservient fashion.

Interestingly, students are still not convinced that her point was legitimate and seem to ignore the professor's endorsement as a later posting suggests that:

> maybe we could learn something from the midterm format . . . its to see what we've learned—whether we understand, and not whether we've memorized the terms well . . . maybe we should be more focussed on the big picture like that—to get as much out of the course as we can . . . once again just a thought.

Jackie responds defensively and dismisses the poster's position:

> I don't know about you, but it is possible for some people to multi-task. I am very focused on the course and its material, our assignments, and our tests. However, I am also concerned with other elements of the course. So, basically, any other topic mentioned on this forum is insignificant, and we should all focus solely on the material?? I'm not too sure about that.

The fact that the other student ignored the professor's support for Jackie's position reinforces her marginal status on the forum. This status is evidenced by the fact that she never posted again.

The majority of member checks supported this analysis, with some noting that it was "highly plausible" and "quite accurate." One submission also pointed to the anonymity offered by the forum and its high readership as environmental factors motivating her initial posting. In terms of validity, the member checks unanimously agreed that an online forum often creates ties between group members who may react with hostility toward outsiders who do not share similar opinions (Hopkins et al., 2004).

Story 2: The Ties That Bind—Clan Development in Online Forums

The analysis of forum postings revealed that some posts are unrelated to course content. We termed these posts *relational* based on the assumption that students post in this manner to establish bonds with other students. The questions for the marketing educator then become "How do these posts support professor-to-student and student-to-student connectivity?" and "What action, if any, can be taken by the educator?" The forum thread "Any Photographers? Web Designers?" provides insights into these questions.

"Andy" is an avid photographer and Web designer, as he describes in his initial post:

> Is there anyone out there interested in photography?
>
> Personally, I love photography. If there is anyone else we should share our work here.
>
> Check out my site at: http://[andy].com
>
> If it doesn't work check back during the day. The site is run off my PC and I don't have a network for my laptop to use so I have to swap the connection when I need to download things to my laptop.
>
> I am also relatively interested in web design. I designed my site my self and I am self taught in xhtml and css, limited in JS. I would love some tips from anyone who has a nicer looking page than mine.

> I find myself struggling to be creative when it comes to web design. I see all these really nice looking websites like [a TA's Web site URL] and I'd love to take that job offering for web design, but I don't know if I could cut it looking at their website.
>
> I'll be interested to see what others have to offer,
> -[Andy]

Although there is greater potential to communicate with a wide range of people in an online forum than in person in a mega-class, students may be reticent because they have no information about each other and common interests are key to the facilitation of communication (Matzat, 2004). As Andy's post demonstrates, students are keen to identify hobbies, interests, and locations that may be a link to others in the class. Although some students may be content to leave the discussion at a superficial level, there is potential for such communication to extend beyond the relational context, as we see in a later discussion between two students we refer to as "Kyle" and "Alvin":

> Kyle: Hey I really like your photography! Photography interests me aswell, however i never spend any time with it anymore. If you'd like to check out my site at [Kyle's Web site URL] I love experimenting with webdesign however the programming of Javascript and things i havn't got a clue. Let me know if you'd like some suggestions for your site EQ
> Alvin: Hey HEY!
> Alvin: Im from [a nearby suburban town] [Kyle]. [Address]. If you want to start a work group or share ideas and stuff im up for it. Yeah, photography is awsome and Kyle, i really like your B and W photos. I personally like to have a future in photography but maybe in a different way then you guys. I race motorcycles (motocross to be exact) and photography is getting pretty big in that area. It's probably not all inspiring for our guys like it is for me but it's cool anyway.
> Alvin: This one i thought you guys might really like. The fish eye makes it insane. [image]
> Alvin: Tell me what you think.
> Kyle: Man i love the fisheye effect. and the contrast of that picture is amazing!
> Kyle: I'll PM you my cell #. . im at [address]. haha. we're like neibours

The realization that both live in the same geographic region provided an opportunity for an academic workgroup to develop. In seeking to expand their workgroup, Alvin then posted a music poll as a screening tool for membership. Subsequently, this became the highest viewed thread in the section and Kyle changed his forum signature to "Anyone from [a nearby suburban town] wanna start a work group? PM / Email Me!" We now see that Kyle did not offer to reveal his real identity through his e-mail address until after he and Alvin had established common interests and locations.

Member checks for Story 2 unanimously support the notion that students often use forums as a means to identify commonalities between themselves and others in the class and that these may be starting points for academic relationships such as work or study groups.

Story 3: Lemmings to the Sea—An Articulate Few Influence the Majority

The initial posts in the third situation are "knowledge-sharing" actions where students share and compare course-related information with others. These posts become more transformational in nature when differences of opinion emerge and posters seek to influence the opinions of their classmates. This example is further complicated when the knowledge sharing is about answers to a take-home test. Although the students were encouraged to share their opinions prior to submitting their take-home test, the professor felt compelled to intervene when posts with misinformation became predominant.

Students were required to complete a take-home test that challenged them to identify the most appropriate quantitative and qualitative designs for gathering information that would assist in the marketing of a new transportation product. The professor set up a dedicated discussion forum for this assignment because his past experience had shown that students often had similar questions so rather than answer each question by private e-mail, it was more efficient and effective to answer student queries in an online forum for all to view. In addition, students were encouraged to discuss the test with their peers, although no collaboration on final answers was allowed. The most active forum participants in previous years had achieved the highest grades on the test. This relationship between test success and forum participation was reiterated to students as a means of encouraging contributions and debate.

In 2005 there were 254 posts about the take-home test as compared to 98 posts in 2004. Whereas the majority of posts in 2004 had been insightful about what was required in the correct answer, the 2005 posts focused on having the right answer as opposed to why that answer was correct. Furthermore, the majority of these posts were promoting an incorrect design as the correct answer. The following excerpts are from a selection of preliminary posts:

> Sasha: i wanted to know if you can use mall-intercept as a quantitative design, where you're engaging customers in the parking lot allowing them to test drive?
>
> Darlene: Mall intercept wouldnt make sense . . . and a telephone interveiw wouldn't really make sense either because the tour operators have to look at and experience this new product being launched into Canada. . . .
>
> Zaid: Can mall intercepts be used, and the results be generalizeable to the population, if malls in different locations of a city are used to take into account socio-economic status??

The correct answer for this question was not a mall intercept, and after 32 posts promoting the wrong design as the answer to the question, the instructor intervened: "I want you to think very carefully about this." Several students

pressed forward on the idea of a mall intercept but were countered by "Nina," another student, when she posted:

> Mall Intercept- I'm not sure. I would say yes, but don't really see how it would work. If we were given the option of doing the showing/testing of segway outside a mall then i would say that for sure. I was thinking maybe telephone interviews, what do u think?

Raul rebuts:

> Think about it for a second, if someone called you and asked you questions such as "would you purchase one?" "do you feel that a segway makes you feel stupid," "Rate the segway in uniquness, convenience etc. . . . Don't you think that you actually need to see and test out the product? You can ask only some questions on the phone, but the consumers has to see/touch and ride the product to actually know if he would eventually consider purchasing it. I hate to say it's not telephone interview, but I can be wrong . . . that's my opinion.

After another 37 posts continuing to argue for the wrong design, the professor provided more guidance in the form of another post. An excerpt from the professor's post reads,

> Don't underestimate logistics and practical issues—do respondents have to see or try something in order to have an opinion that will help the client make a decision about marketing strategies. This isn't about buying something right now (ie they are not trying to predict market share). . . it is about developing a promotion program and understanding objections to a concept. Think very very very very carefully about location (subtle enough for you!).

The posts that followed, many from new students, appeared to subscribe to the views of the majority (i.e., using the mall intercept). In a further effort to offer guidance, the professor wrote:

> I cannot keep out of this conversation because there is a lot of erroneous information being bandied about . . . . Think about the decision that has to be made and whether you need to generalize to the larger population . . . . The design you seem to be leaning toward makes no sense from a practical perspective. Some of you touched on those practical issues. If you are confused go back and read through the postings. All I can say is the majority of the postings I have read are barking up the wrong tree, but a few of you know exactly what should be done and your rationale for your choice is right on. So for the rest of you . . . instead of being influenced by what appears to be majority opinion . . . go back to basics . . . read the resource material, review your notes . . . and come to your own decision.

The example clearly illustrates one of the risks in collaborative learning, namely, erroneous interpretations of concepts and principles. When these interpretations and applications are presented in a persuasive and unrelenting fashion, other learners can be persuaded to abandon their own opinions and go with the majority (Haythornwaite, 2001).

A further issue is the role of the professor on the forum. In most online situations to be one voice among many (McGrath, 1997-1998) is quite appropriate. However, this was a testing situation and students were being misled by an articulate few. The professor was faced with the ethical dilemma of not wanting to provide too much help on a test and simultaneously hesitant to watch students be led astray by the persuasive but incorrect guidance of a few articulate students (Haythornwaite, 2001). The intent of the professor's postings gradually changed from asking students to reconsider what they had suggested to being more direct and specific. Regardless of the content or tone of the professor's posts, these messages were apparently ignored because a substantial proportion of the class chose the wrong answer. This situation illustrates Coombs's (2002) point that a position is viewed as legitimate based on the number of unique participants who post and whether the majority of these posts are supportive of the initial position.

The member check for this story sought to understand why a content-related question resulted in heated debate. Results revealed that this occurrence is inevitable in educational forums so long as the forum deals with course content and students lack confidence in their own conceptual understanding. The vast majority of member checks noted that the opinions of their peers could indeed persuade them to change their test answers.

DISCUSSION

Although online forums and learning communities are already established as pedagogical tools within education literature, our results provide new insight into the use of online discussion forums in mega-classes. Notably, our findings reveal that netnography provides a number of advantages to marketing educators of mega-classes over other tools.

Through the application of netnography, this study uncovers several insights into general forum implementation and management. The finding that students who participate more often are those who earn the best marks is important as it suggests that (a) forum-usage students gain knowledge over and above that which is gained elsewhere or (b) better students tend to congregate on forums. To the extent that better students are willing to share their knowledge, both cases are seen as beneficial. One member check offered,

> I suggest making it known to next yrs students that there was a trend in those students who took part in the forum and their averages being higher than those who did not. I also suggest that you exclude the major breakdown when you share this information as many would find it discouraging.

Our results further support this in two ways: (a) Posters who posted student knowledge-sharing posts performed significantly better than those who did not, and (b) those who passively observed performed significantly better than those who did not use the forum. In this regard, forum activity should be judged on indices of posting activity and viewership. Practically, marketing educators adopting forums should (a) track posting activity, (b) promote the value of forum participation (i.e., the high correlation between participation and performance in the course), (c) encourage posting activity that is student knowledge sharing (e.g., through bonus marks, recognition, participation marks, etc.), and (d) consider formal methods to encourage passive viewership on the forum (e.g., link participation marks to forum registration or post class quizzes on the forum).

Results further highlight the importance of the number and type of forums made available, where practical issues, such as having to scroll down a long list or click to a next page, are enough to discourage both posting and viewing for some students. Thus, those who teach mega-classes should employ a variety of tools and strategies to enhance the learning environment. In this regard, it is recommended that marketing educators develop and adopt well-planned forums to increase student use. This can be achieved through collaboration with a teaching assistant (or equivalent) with considerable expertise and experience in forum/Web design to design, develop, and implement the forum. Related to this is the finding that the case study drove more students to the forum, which suggests that course requirements that can be complemented by forums should be included in the courses of marketing educators using forums. Furthermore, the implementation plan for the forum should encourage significant and regular intervention by the marketing educator. Although determining when and how to intervene is challenging (Nicol et al., 2003), the opportunity to participate directly is advantageous over most situations where the role of the educator is as a participant coach.

More important, the netnographic findings of the study offer insight into the nature of communication in the mega-class. Specific to the context of this study and similar to Vrasidas et al. (2004), we find that both the social and informational aspects of online discussion—common in forums—were integral to building an effective learning community. For example, the sole purpose of many of the posts in our study was to identify common interests. This suggests that discussion forums fulfill an important social networking function. Story 1 confirms the power of the online forum to create ties between group members who are hostile toward perceived outsiders who do not share similar opinions (Hopkins et al., 2004). The story also highlights differences in the consumption practices of students. Some students (e.g., Jackie) clearly view consumption as a passive process whereby students follow instructions and examples blindly, whereas others (i.e., TAs and other students responding in Story 1) see it as an interactive process between the professor and students. Indeed, one member check pointed out that some students see education as a product that is necessarily perfect in all aspects, and thus, students retaliate against any identifiable imperfections. This again highlights the importance of the marketing educator working with a team skilled in forum/Web design to reduce function and content errors. Furthermore, results from Story 2 highlight the importance of relational threads and the meaning of social consumption in the mega-class. In addition to marketing education acting as a vehicle of pure social communication, students also have the opportunity to forge connections from similar interests, hobbies, and locations to build workgroups. It is therefore suggested that marketing educators adopting forums allow for informal and non-course-related chat. We also learned that men and women have distinctive styles in online discussions (Barrett & Lally, 1999; Fauske & Wade, 2003-2004) and evaluate the online environment differently (Sullivan, 2001). The marketing educator must be cognizant and remain attentive to such differences and include consideration of these differences in the design, development, and promotion of the forum. Similarly, and perhaps disadvantageously, a point may be viewed as legitimate based on the number of different people who post and whether the majority of these posts are supportive of the initial position—as illustrated in Story 3 and in Coombs (2002). Because what was once a one-to-many transaction (professor to students) has now become a many-to-many (professor/students to students) transaction, new meaning is bestowed on the consumption of the marketing education product. This has implications for content dissemination, student learning, and mega-class control as shown in Story 3. Specifically, the marketing educator and a team of reliable teaching assistants are advised to monitor forum activity very closely and regularly (e.g., every 4 to 6 hours) and intervene or facilitate when necessary.

In turn, we see several advantages arising from the increased use of netnography in mega-class environments. First, the educator is able to uncover meanings beyond postings and strings, or groups of postings, to enable better and immediate understanding of student needs and enable course improvement. Second, more data can be gathered on professor-to-student, student-to-student, TA-to-student, head TA-to-student, and professor-to-TA relationships than can be gathered through other evaluation methods. Third, student morale can increase as a result of disclosing the use of netnography (i.e., due to the increased focus on student needs). Fourth, netnography allows for concurrent research and response, which is unavailable through other methods. Fifth, netnography is a naturalistic and unobtrusive method of inquiry, thus reducing inaccurate responses, subject annoyance, respondent effects, interviewer effects, and so forth.

In summary, netnography is presented as an effective method for creating an improved overall learning environment in a mega-class. Specific direction for marketing

educators is also provided. The challenge lies only in its proper design, structure, implementation, monitoring, and intervention as well as the technical abilities of and training provided to the students. Furthermore, researchers may want to investigate the issue of selection and socialization with respect to forum participation and performance by collecting longitudinal rather than cross-sectional data. Future work may also focus on course culture in mega-classes from the perspective of student engagement. The National Survey of Student Engagement presented compelling data that indicate a strong relationship between five benchmarks of student engagement and learning (Carini, Kuh, & Klein, in press; Kuh, 2003). One of these benchmarks is adaptive and collaborative learning. Perhaps discussion forums are a mechanism for enhancing collaborative learning when face-to-face interaction is not possible, as is the case in mega-classes.

NOTES

1. Australopithecines are an extinct group of hominids related to humans. They occupied the earth in Africa between approximately 1.7 and 4.4 million years ago (Aiello & Dunbar, 1993).

2. *Highly skilled* refers to technical ability with online forums.

3. No participation marks were given for forum use.

4. See Table 6 for *t*-test results confirming statistical significance. Note that results for chatters are limited by small sample.

REFERENCES

Aiello, L. C., & Dunbar, R. I. M. (1993). Neocortex size, group size, and the evolution of language. *Current Anthropology*, *34*, 184-193.

Altheide, D. L. (1987). Ethnographic content analysis. *Qualitative Sociology*, *10*, 65-77.

Atwong, C., & Hustad, P. S. (1997). Internet technology and the future of marketing education. *Journal of Marketing Education*, *19*(3), 44-55.

Barrett, E., & Lally, V. (1999). Gender differences in an on-line learning environment. *Journal of Computer Assisted Learning*, *15*, 48-60.

Brown, R. E. (2001). The process of community-building in distance learning classes. *Journal of Asynchronous Learning Networks*, *5*(2), 18-35.

Carini, R. M., Kuh, G. D, & Klein, S. P. (in press). Student engagement and student learning: Testing the linkages. *Research in Higher Education*.

Chan, A. (1997). Corporate culture of a clan organization. *Management Decision*, *35*(2), 94.

Chopoorian, J., & Karakaya, F. (2001). The effects of class size and learning style on student performance in a multimedia-based marketing course. *Journal of Marketing Education*, *23*, 84-90.

Cohen, D., & Prusak, L. (2001). *How social capital makes organizations work*. Boston: Harvard Business School Press.

Conrad, D. (2002). Inhibition, integrity and etiquette among online learners: The art of niceness. *Distance Education*, *23*, 197-212.

Coombs, W. T. (2002). Assessing online issue threats: Issue contagions and their effect on issue prioritization. *Journal of Public Affairs*, *2*, 215-229.

Cooper, M. M. (1995). Cooperative learning: An approach for large enrollment courses. *Journal of Chemical Education*, *72*, 162-164.

Drago, W., & Peltier, J. (2004). The effects of class size on effectiveness of online courses. *Management Research News*, *27*(10), 27-41.

Drago, W., Peltier, J., & Sorenson, D. (2002). Course content or instructor: Which is more important in on-line teaching? *Management Research News*, *25*(6/7), 69-83.

Dunbar, R. I. M. (1992). Neocortex size as a constraint on group size in primates. *Journal of Human Evolution*, *22*, 469-493.

Fauske, J., & Wade, S. E. (2003-2004). Research to practice online: Conditions that foster democracy, community, and critical thinking in computer-mediated discussions. *Journal of Research on Technology in Education*, *36*, 137-153.

Foot, D. K. (2001). Canadian education: Demographic change and future challenges. *Education Canada*, *41*(1), 24.

Foster, M. (2004). *Enhancing teaching practice in the school of business management* (Working Paper). Toronto, Canada: Ryerson University.

Giesler, M., & Pohlmann, M. (2003). The social form of Napster: Cultivating the paradox of consumer emancipation. *Advances in Consumer Research*, *30*, 94-100.

Gilbert, S. (1995). *Quality education: Does class size matter?* (Research File, 1(1)). Ottawa: Association of Universities and Colleges of Canada.

Granitz, N., & Greene, C. S. (2003). Applying e-marketing strategies to online distance learning. *Journal of Marketing Education*, *25*, 16-30.

Granitz, N., & Ward, J. C. (1996). Virtual community: A sociocognitive analysis. *Advances in Consumer Research*, *23*, 161-166.

Guseman, D. (1985). Class size impact upon student learning and attitudes in the introductory marketing course. *Journal of Marketing Education*, *7*(1), 2-7.

Hay, A., Hodgkinson, M., Peltier, J. W., & Drago, W. A. (2004). Interaction and virtual learning. *Strategic Change*, *13*, 193-204.

Hay, A., Peltier, J. W., & Drago, W. A. (2004). Reflective learning and online management education: A comparison of traditional and on-line MBA students. *Strategic Change*, *13*, 169-182.

Haythornwaite, C. (2001). Exploring multiplexity: Social network structures in computer-supported distance learning class. *The Information Society*, *17*, 211-236.

Hill, M. C. (1998). Class size and student performance in introductory accounting courses: Further evidence. *Issues in Accounting Education*, *13*(1), 47-64.

Hise, R. T., Conant, J. S., & Gwinner, R. F. (1989). Mass sections: Challenges, consequences, and strategic considerations. *Journal of Marketing Education*, *11*(3), 19-27.

Hodson, P., Saunders, D., & Stubbs, G. (2002). Computer-assisted assessment: Staff viewpoints on its introduction within a new university. *Innovations in Education and Teaching International*, *39*, 145-152.

Homer-Dixon, T. (2001). *The ingenuity gap*. Toronto: Vantage Canada.

Hopkins, L., Thomas, J., Meredyth, D., & Ewing, S. (2004). Social capital and community building through an electronic network. *Australian Journal of Social Issues*, *39*, 369-379.

Hunt, L., Eagle, L., & Kitchen, P. (2004). Balancing marketing education and information technology: Matching needs or needing a better match? *Journal of Marketing Education*, *26*, 75-88.

Jonsson, S., & Macintosh, N. B. (1997). Cats, rats, and ears: Making the case for ethnographic accounting research. *Accounting, Organizations and Society*, *22*, 367-386.

Jung, I., Choi, S., Lim, C., & Leem, J. (2002). Effects of different types of interaction on learning achievement, satisfaction and participation in Web-based instruction. *Innovations in Education and Teaching International*, *39*, 153-162.

Karns, G. L. (2005). An update of marketing student perceptions of learning activities: Structure, preference, and effectiveness. *Journal of Marketing Education*, *27*, 163-171.

Kaynama, S. A., & Keesling, G. (2000). Development of a Web-based Internet marketing course. *Journal of Marketing Education*, *22*, 84-89.

Kellog, W. A. (1999). Community-based organizations and neighborhood environmental problem solving: A framework for adoption of information technologies. *Journal of Environmental Planning and Management*, *42*, 445-469.

Klein, H. K. (1999). Tocqueville in cyberspace: Using the Internet for citizen associations. *The Information Society*, *15*, 213-220.

Kozinets, R. V. (1997). "I want to believe:" A netnography of the X-Philes' subculture of consumption. *Advances in Consumer Research*, *24*, 470-475.

Kozinets, R. V. (1998). On netnography: Initial reflections on consumer research investigations of cyberculture. *Advances in Consumer Research*, *25*, 366-371.

Kozinets, R. V. (1999). E-tribalized marketing? The strategic investigations of virtual communities of consumption. *European Management Journal*, *17*, 252-264.

Kozinets, R. V. (2002). The field behind the screen: Using netnography for marketing research in online communities. *Journal of Marketing Research*, *39*, 61-72.

Kozinets, R.V. (in press). Netnography 2.0. In R. W. Belk (Ed.), *Handbook of qualitative research methods in marketing*. Cheltenham, UK: Edward Elgar Publishing.

Krippendorf, K. (1980). *Content analysis: An introduction to its methodology*. Beverly Hills, CA: Sage.

Kuh, G. D. (2003). What we are learning about student engagement from NSSE. *Change*, *35*(2), 24-32.

Lim, C. P., & Cheah, P. T. (2003). The role of the tutor in asynchronous discussion boards: A case study of a pre-service teacher course. *Educational Media Interactive*, *40*, 33-48.

Matzat, U. (2004). The social embeddedness of academic online groups in offline networks as a norm generating structure: An empirical test of the Coleman model on norm emergence. *Computational and Mathematical Organization Theory*, *10*, 205-226.

Mayrhofer, W. (1998). Between market bureaucracy, and clan coordination and control mechanisms in the Cranfield network. *Journal of Managerial Psychology*, *13*, 241.

McGrath, C. (1997-1998). A new voice on interchange: Is it talking or writing? Implications for the teaching of literature. *Journal of Educational Technology Systems*, *26*, 291-297.

Mehlenbacher, B., Miller, C. R., Covington, D., & Larsen, J. S. (2000). Active and interactive learning online: A comparison of web-based and conventional writing classes. *IEEE Transactions on Professional Communication*, *43*, 166-184.

Moloney, M. F., Dietrich, A. S., Strickland, O., & Myerburg, S. (2003). Using Internet discussion boards as virtual focus groups. *Advances in Nursing Science*, *26*, 274-286.

Nelson, M. R., Keum, H., & Yaros, R. A. (2004). Advertainment or adcreep: Game players' attitudes toward advertising and product placements in computer games. *Journal of Interactive Advertising*, *5*(1). Retrieved January 27, 2007, from http://www.jiad.org/vol5/no1/nelson/index.htm

Nelson, M. R., & Otnes, C. C. (2005). Exploring cross-cultural ambivalence: A netnography of intercultural wedding message boards. *Journal of Business Research*, *58*, 89-95.

Nicol, D. J., Minty, I., & Sinclair, C. (2003). The social dimensions of online learning. *Innovations in Education and Teaching International*, *40*, 270-280.

O'Toole, D. M., Spinelli, M., & Wetzel, J. N. (2000). The important learning dimensions in the school of business: A survey of students and faculty. *Journal of Education for Business*, *75*, 338-342.

Ouchi, W. G. (1980). Markets, bureaucracies, and clans. *Administrative Science Quarterly*, *25*, 129-141.

Palincsar, A. S. (1998). Social constructivist perspectives on teaching and learning. *Annual Review of Psychology*, *49*, 345-375.

Peltier, J. W., Drago, W., & Schibrowsky, J. A. (2003). Virtual communities and the assessment of online marketing education. *Journal of Marketing Education*, *25*, 260-276.

Preece, J. (2001). Sociability and usability in online communities: Determining and measuring success. *Behaviour & Information Technology*, *20*, 347-356.

Priluck, R. (2004). Web-assisted courses for business education: An examination of two sections of principles of marketing. *Journal of Marketing Education*, *26*, 161-173.

Richardson, B. (2005). New consumers and football fandom: The role of social habitus in consumer behaviour. *Irish Journal of Management*, *25*, 88-101.

Schech, C. L., & Kinicki, A. J. (1994). The effect of class size on student performance: Development and assessment of a process model. *Journal of Education for Business*, *70*, 104-111.

Schwartz, H., & Jacobs, J. (1979). *Qualitative sociology*. New York: Free Press.

Smith, L. J. (2001). Content and delivery: A comparison and contrast of electronic and traditional MBA marketing planning courses. *Journal of Marketing Education*, *23*, 35-44.

Smith, L. W., & Van Doren, D. C. (2004). The reality-based learning method: A simple method for keeping teaching activities relevant and effective. *Journal of Marketing Education*, *26*, 66-74.

Sullivan, P. (2001). Gender differences and the online classroom: Male and female college students evaluate their experiences. *Community College Journal of Research and Practice*, *25*, 805-818.

Toth, L. S. (2002). Class size and achievement in higher education: A summary of current research. *College Student Journal*, *36*, 253-261.

Vrasidas, C., Michalinos, Z., & Chamberlain, R. (2004). The design of online learning communities: Critical issues. *Educational Media International*, *41*, 137-143.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

Wallace, R. M. (2003). Online learning in higher education: A review of research on interactions among teachers and students. *Education, Communications & Information*, *3*, 241-280.

Walther, J. B., & D'Addario, K. P. (2001). The impacts of emoticons on message interpretation in computer-mediated communication. *Social Science Computer Review*, *19*, 323-345.

Wegerif, R. (1998). The social dimension of asynchronous learning networks. *Journal of Asynchronous Learning Networks*, *2*(1), 34-49.

Wheatley, M. (1992). *Leadership in the new science*. San Francisco: Berrett-Koehler.

Williams, W. M., & Ceci, S. J. (1997). "How' M I doing?" *Change*, *29*(5), 12-23.

Wong, C. K., Wong, W., & Yeung, C. H. (2001). Student behavior and performance in using a Web-based assessment system. *Innovations in Education and Teaching International*, *38*, 339-346.

Wulf, D. H., Nyquist, J. D., & Abbott, R. D. (1987). Student's perceptions of large classes. *New Directions for Teaching and Learning*, *38*, 17-30.