**Computer-Mediated Communication and Education**

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Computer mediated communication is a fairly new phenomena that has been taking over the world as we know it. Everyday more and more technology is being developed and broadcasted and this in turn makes our everyday lives that much easier. The first one I can remember is “AOL,” or America online. This connected you directly to the internet with instant messenger and email all in one. When I first used it, it blew me away. I could not believe that I was able to talk to my friends in a tiny box and have a full on conversation for hours if I so chose to do so and it was all available on the internet. Chat rooms were also right there in front of you. Having the availability to talk to numerous people all at once in one giant instant message was truly, I believe, an eye opening experience. There was nothing else in the world like AOL. It took over my life for a while. I just could not get enough of it; the entertainment was never ending.

 Now we have text messaging. This is the new trend these days. You can text message anywhere you want as long as there is enough signal on your cell phone to send and receive messages. It is fast, easy, and reliable. And what is better than having text messaging, email, and the internet all in one? Having the ability to have all of these enclosed in a few inches of plastic that easily fits right in your pocket and is connecting you to anywhere in the world. This is truly an amazing accomplishment in the advancement of technology. Everyone is walking around with a Blackberry in their pocket or some other device that it enabling them to chat, email, and connect to just about anyone. Every time you think you have the best system, something new and exciting is created.

 Computer mediated communication is all of this put into a nutshell. It is instant messenger, email, chat rooms, text messaging, Blackberry’s, and a whole new lifestyle all intertwined to make our lives easier. It is an amazing resource and an extremely helpful headway of information that progresses each and everyday in all different directions. According to Wikipedia, computer mediated communication is defined as, “any communicative transaction which occurs through the use of two or more networked computers. While the term has traditionally referred to those communications that occur via computer-mediated formats (i.e., instant messages, e-mails, chat rooms) it has also been applied to other forms of text-based interaction such as text messaging. Research on CMC focuses largely on the social effects of different computer-supported communication technologies. Many recent studies involve Internet-based social networking supported by social software.”

 Computer mediated communication I believe is what is currently running and enabling the world and the economy to progress so quickly. It is allowing individuals to communicate efficiently and effortlessly in the comfort of their own home or office, and the entire idea of computer mediated communication has continuously been a huge success. There is no other way in the world an individual is able to talk to someone on the opposite side of the globe within seconds and minus the cost of a huge phone bill. There is no other way someone can purchase items on the opposite side of the globe within seconds and without the hassle of talking to someone over the phone in order to do so. It is truly a remarkable system that can connect every single person on earth given the opportunity.

 While attending West Virginia University for the past three years there has been amazing accomplishments still in the world of computer mediated communication. It seems to be never ending and unstoppable when it comes to new ideas and better understanding. When I first came to this school the thought of taking a class via the internet was unheard of. I never thought something like that would exist, and even if it did, would be credible to an institution such as this one. Now, three years later, it is an aspect of school that students take advantage of each and every day. They can take classes and gain credit in the comfort and privacy of their home, whether that is here in Morgantown, or ten hours away somewhere. Students have the opportunity to prove to teachers that they have the skills to get a good grade in the class all by connecting to a source online. When you think about how much of a luxury that is to some people it is extraordinary. The things you are able to do because of computer mediated communication are what is making this world go round right now in this day of age. You can now get a degree on the computer. A real, credible, degree from thousands of institutions all over the world is attainable via the internet and computer mediated communication. You do not even need to attend class at all anymore. Everything is able to be broadcasted through your personal computer, and the knowledge needed to succeed is right there in front of you.

 Recently there has been many studies and research done on distance education. This being education available via the internet, through cross-cultures, and all around the world. According to Keegan, he states, “In the 1980s distance education emerged as a standard component of the provision of education in many national systems. In contrast with conventional education which is oral and group-based, distance education shatters the interpersonal communication of face-to-face provision and disperses the learning group throughout the nation.

 By harnessing industrialized processes to education and responding to the growth of privacy and loss of the sense of community which are characteristics of post-industrial society, distance education has opened access to study towards all levels of qualification to the working adult – the student who continues to contribute to the nation’s Gross National Product throughout the length of his or her study programme.”(1986) The idea of distant education is the ability to learn and communicate in other ways outside of the classroom. Like Keegan stated before it takes away from face-to-face and group communication because it is available in the privacy of your own home.

In the 19th century a “school” was a one room classroom that had people of all ages crammed together. Sometimes the students were older than the teachers. They were taught basic literacy, penmanship, arithmetic, and “good manners.” Recitation, drilling, and oral quizzes at the end of the day were the norm in classrooms across America. Because education at this time was so important local families would supply the schools with what was needed to maintain as comfortable an atmosphere as possible. Families would build desks and tables in order for students to have a place where they could read and write. Farmers would supply wood for the stove to keep the school house warm in the winter. Sometimes teachers would even live at different households. The only resources available to those schools were basic necessities like a piece of slate, chalk, and a few books. It is amazing to see just how far we have come in such a short period of time. A lot of people have been trying to figure out if that huge transformation is benefitting the world today or taking away important aspects of everyday life that people have been able to ignore due to the availability of other resources to do the work for them. One very important aspect would be the sense of community. The feeling of belonging to a certain institution, making friends, having a social life, and sharing different skills and leadership positions with others is an extremely important part of life that puts a lot of emphasis on shaping and molding peoples minds. For myself, I think this is one of the greatest obstacles concerning computer-mediated communication because I think community might be the biggest part being taken away from society. Primarily face-to-face interaction, group and organizational work, and all other fields that involve working together in person and on a more intimate level are the things being taken away from our culture. Others may disagree, however, and say that there is a different community available through computer-mediated communication, and this is correct. But even so, it is not the same as it was in the past, and know one can say whether either one is better or worse than the other, but my primary argument is the depletion of community in everyday life. Is distance education and computer-mediated communication or traditional teaching methods better?

A study was done in July, 2002 at Regent University in Virginia Beach, Virginia by A. Alfred P. Rovai and it was titled, “A preliminary look at the structural differences of higher education classroom communities in traditional and ALN courses.” He took 326 adult learners who were enrolled in a mix of 14 undergraduate and graduate courses at two urban universities and were looking to see how a sense of community differs between students enrolled in traditional face-to-face and those enrolled in asynchronous learning network (ALN) courses. “As operationalized by the Sense of Classroom Community Index (SCCI), there appears no significant difference in classroom community between the two groups of subjects. However, a discriminant analysis shows a significant overall difference in community structure between the two groups. Variations between groups on feelings of similarity of needs, recognition, importance of learning, connectedness, friendship, thinking critically, safety, acceptance, group identity, and absence of confusion are the characteristics contributing mostly to this difference in learning effectiveness.” Rovai (2002). First Rovai looked at four key components of classroom community: spirit, trust, interaction, and learning. The first component, spirit, denotes recognition of membership in a community and the feelings of friendship, cohesion, and bonding that develop among learners as they enjoy one another and look forward to time spent together. The second component, trust, is the feeling that the community can be trusted and feedback will be timely and constructive. Trust represents a willingness to rely on other members of the community in whom one has confidence. Interaction is the third component and it can be either task-driven or socio-emotional. Task-driven being the ability to get tasks done and socio-emotional is the relationships you have with other learners. The last component Rovai looked at was learning. Learning being your common goal and commitment to the educational purpose you have there. He looked at these components to try and figure out the relationship one has with the classroom and others in it. He states in his study, “The move of many schools, particularly post-secondary schools, toward increased use of technology to deliver courses and programs at a distance has raised the question of how best to foster community among learners who are physically separated from each other and from the school . Such physical separation gives rise to feelings of disconnectedness, promotes feelings of isolation and lack of personal attention, and inhibits the development of interpersonal relations.” Some argue that students with poor interpersonal relations are more likely to experience academic failure. Coleman, Hoffer (1987). These findings suggest that a strong sense of classroom community could have a positive influence on student academic performance. In order to be social and have a good learning environment having others around you and having peer support is a big part of the learning process. Having distant education can take away from that even though the idea of community is available through online courses and discussion boards. It is just not the same.

ALN courses are a way of learning outside of the classroom. People still have the availability to talk to others but it is used in a different fashion. ALN courses use two-way communications as the vital characteristic of this form of distance education. One describes the ALN model as a telelearning infrastructure in which learners access resources and interact asynchronously (i.e., not at the same time). Mayadas (1994). With this sort of learning individuals are able to still connect and interact but it is through a different means of interaction such as the blackboard learning system for example. The learning is distant and the need to be online at the same time is not there. A lot of people will argue that this is not a sense of community at all but community in general is the idea of making connections to others. And learning is the idea of making connections between yourself and also an instructor. You can still connect and still learn, so which one is more beneficial?

 For this study 52 subjects were enrolled in a Blackboard.comSM course, and 274 were enrolled in traditional face-to-face courses. The study was comprised of 82 males and 192 females and the duration of the study was one semester, or 16 weeks. Data for the study were gathered from: (a) the Sense of Classroom Community Index (SCCI), (b) messages posted by subjects to the Blackboard.comSM course discussion boards, and (c) overall course statistical data routinely tallied and retained by the Blackboard.comSM e-learning system. Rovai (2000). The SCCI was used to measure sense of classroom community. It consists of a self-report questionnaire of 40 items and these items were looking for a sense of spirit, trust, interaction, or learning between the student and the course. It was based on a five-point Likert scale that ranged from, “strongly agree,” to “strongly disagree.” All the subjects voluntarily registered themselves into either the online course or the traditional course, no subjects were forced into these classes.

 “Descriptive statistics were calculated for classroom community, as operationalized by the SCCI, and for the number of messages posted by subjects to the Blackboard.comSM discussion boards. Independent t-tests and a one-way analysis of variance (ANOVA) were conducted to determine if differences in classroom community existed between the traditional and distance education groups and between all 14 courses. A Pearson product-moment correlation coefficient was also computed for classroom community and the number of messages posted. Finally, a two-group descriptive discriminant analysis was conducted to determine how students enrolled in traditional and Blackboard.comSM courses differ based upon their responses to the SCCI items. The independent (predictor) variables were the 40 items contained in the SCCI and the dependent variable was group membership (traditional or Blackboard.comSM), a nominal scale variable. A stepwise procedure was used because there were no reasons for assigning some predictors higher priority than others.” Rovai (2002). Lots of tests were run to see just how different these two methods of learning were to each other. The thought process and time put into this study was extremely impressive. The end result of the entire study was that ALN courses can provide just as much learning and interaction as traditional face-to-face courses. The sense of community and interaction can be equal to that of regular classes based on the use of discussion boards and computer-mediated communication. It is safe to say that ALN courses have the ability to build and sustain basic classroom community levels similar to those in face-to-face interaction classrooms. However, the research literature suggests distance education courses are often characterized by disconnectedness and feelings of isolation, which suggest lower levels of community. Rovai (2002)

 This study obviously is one of many, and that needs to be kept in mind, it is not set in stone that online courses and distance education lack the sense of community. It is safe to say, however, that education sure is not what it used to be. Who is to say whether that is for better or worse? There really is no telling since distance education is somewhat new to the field but some seem to have a certain opinion on the topic. It is clear that online courses and distant education brings in revenue. Online courses may be cheaper than those taught on a face-to-face basis. However, online courses cost a lot of money as well. Software is not cheap. Software that is qualified enough to compose a class, have message boards, have the ability to contact instructors and hold online discussions tend to be very expensive. Of course the student would be paying for these amenities when they sign up for the class, but are the students really getting what they are paying for? Sure the instructors have already gone through school and are getting paid regardless. Some people seem to think that online courses are easier and that is one of the reasons why they have become more popular among students. All of these questions are unanswered as of now, but looking at research we can compare the two types of learning environments.

 Of course one of the main focuses of online courses is the ability to access them anywhere and at anytime. This availability gives lots of people who otherwise would not be able to attend the class the opportunity to enroll and learn. This does not pertain to a lot of individuals but for some it may be what we like to call, “A life saver.” Take single parents or working parents for example. The chance for them to get out of their job and go to school is not as easily accessible as say an eighteen year old straight out of high school. Online courses give them the opportunity to take the course at any time through out the day or night and get the credit they deserve. With adults having to update their knowledge and skills constantly, the adult learners become one of the fastest growing markets in higher education (Worley, 2000).

 Not just the ability for single parents to have the ability to take online courses and raise a successful family, but for organizations to use online courses to train their employees is a huge advantage to the work field. It no longer absolutely needs to be on face-to-face terms. Online learning also provides opportunities for employee training (Stellin, 2001). For employers online training can be cheaper than face-to-face instruction because you do not need to pay for someone to be there and train. The employee can learn the basics online and then take it from there. Also online training would be more easily accessible to employees. This is not a fact, but in general having the ability to train yourself when you have the time and not when someone else tells you to is a huge advantage to those that are busy and can’t find the time to do so. Circuit City is an example of using online learning to train their employees. They used an e-learning system called “DigitalThink” which is a San Francisco based e-learning company.

 Students surveyed have said that they like the luxury of being able to access the class at anytime and learn the material at their own pace. A lot of students have really bought into the idea of online courses and distant education. Not all people learn the same, however, as we know. A lot of people cannot look at a computer screen and teach themselves the material. Some are hands on learners, some need to hear it in order to understand it. These are all things that might burden those that plan on taking online classes. I have recently learned that there are three types of learners: active learners and passive learners, intuitors and sensors, visual and verbal learners. Active learners take up the majority of students and they seem to particularly appreciate the interaction and like to participate in the learning process. Having online courses and the availability to use multimedia devices can play an active role in learning in ways that the traditional learning format cannot teach. With that said, possibly, online education may work better than other forms of teaching for active learners. But not everyone can be an active learner. Not everyone is suitable for an online course and this is where we run into a dilemma.

 In some cases only those students that participate on the regular, really put their heart into their work and care what the outcome will be are those that will be successful in online courses. Those that are self-motivated and self-disciplined, with good reading and writing skills, along with good time management skills needed to get the work done that is necessary and have a good comfort level with computers are those that will be successful in distant education. According to the Institute for Higher Education Policy, under “Benchmarks for success in internet-based distant education” they state that students should also be aware that their responsibility is almost the same, if not more, in online learning as in traditional learning setting (IHEP, 2000). Although we have seen that there are different types of learners and that only certain individuals that possess certain quality characteristics will do well in distant education, we still do not know for sure whether or not it is completely effective. The majority of recent reports argue that there is not significant difference between online learning and traditional learning in terms of student grades, test scores, and other measures of student achievement (Worley, 2000). Further, no difference is found in the students’ overall ratings of course content, rigor and other aspects of distance learning. Nor have the majority of researchers found significant differences in students’ ratings of the instructors’ effectiveness, contribution to learning, and overall quality (Spooner, Jordan, Algozzine, 1999). With all of this in mind how can a student have any different reaction to an online course rather than a traditional course? Their ability to hold interest in that class and the motivation to do well will probably be the same.

 Now that we have seen that apparently there is no difference between traditional and online courses, why is distant learning expanding so much and so fast? All over the world online courses are becoming so overwhelmingly popular. Is it because they are easier? Is it because for certain individuals it is easier to learn via the computer? Is it because a lot of single parents have jumped on the bandwagon to get a degree? These are all questions that seem to run through people’s minds about this topic. If you look at some statistics it is impressive to see just how much this new way of teaching and learning is expanding. The internet-based distance education has become an increasingly popular channel to recruit new students and train employees—for a host of reasons. In 1993, fewer than 100 colleges and universities delivered Internet-based courses. By 1999, however, nearly two-thirds of the 3,200 accredited four year colleges and graduate schools offered Internet-based courses, with MBA program playing a leading role in this explosion (Arbaugh, 2000). In 1999, the U.S Department of Education reported that 87 percent of major public institutions provided distance classes primarily through internet. There was another statistic I found that said there was a 72 percent increase in distance education programs from 1994-95 to 1997-98, with another 20 percent of the institutions planning to launch a new program within the next three years. The number of students who were in distance education courses was estimated to be over 1.6 million in 1997-98, so you can only imagine what that percentage is now. Online education is expected to provide an alternative approach to satisfy the demand of higher education. The low-cost diffusion of internet technologies, new student-centered pedagogical thinking, increasing political commitment, competition among educational institutions and other factors will continue to drive the online education forward (Dumort, 2000).

 Because there is no way of telling whether or not distant education is more effective than face-to-face interaction, could there possibly be a way of bringing both of these concepts together? There is a new way of teaching that could do just that, it is called the “Hybrid model of education.” This model is a way of having both online class and face-to-face interaction all in one. Students would have the opportunity to do work online or have discussions online but also would have the ability to meet in class on a more intimate basis. The goal of hybrid courses is to join the best features of in-class teaching with the best features of online learning to promote active independent learning and reduce class seat time (Garnham, Kaleta, 2002). For example for a possible hybrid course one could take notes, do class activities, read lectures, and even do homework assignments all from the luxury of your seat at home. After that one could take quizzes or tests in class to avoid any possible cheating and any unanswered questions, if they were not answered online already, could be answered on a one-to-one, face-to-face basis with an instructor. For these types of classes they could enroll anything from freshman to seniors, full-time or part-time, a number of possibly fifteen to a possible two-hundred if that was the intention. It could also reach out to those traditional college-aged individuals or older adult students. This method of teaching could really help out a large sum of people that might not be able to make it to every single class, or might not be able to teach all the information to themselves by just looking at a computer screen. It has the flexibility to have everything in one. Hybrid courses offer a number of advantages over face-to-face teaching and totally online courses. Instructors reported that the hybrid course model allows them to accomplish course learning objectives more successfully than traditional courses do. Most faculty noted increased interaction and contact among their students and between the students and themselves (Garnham, Kaleta, 2002).

 Hybrid courses give a lot more leniency to both students and the faculty. Sometimes it is not just the student that cannot make it to class every single day. Instructors have lives and families as well and with the advantage of not having to be in a classroom every single day it gives everyone the chance to learn at their own pace, do work at their own pace, and make time for their classes and social lives. Instructors reported that students wrote better papers, performed better on exams, produced higher quality projects, and were capable of more meaningful discussions on course material. These qualitative assessments of better student learning are supported by quantitative data from the University of Central Florida, which show that students in hybrid courses achieve better grades than students in traditional face-to-face courses or totally online courses (Garnham, Kaleta, 2002).

 For anyone that is used to being in the classroom from kindergarten all the way through high school and even through college the idea of this hybrid model might seem funny or absolutely absurd. I think a model such as this puts together the best of both worlds all into one. The luxury of having a class such as this one would be that even if you just try it out and you do not like it, you can always go back to the traditional face-to-face course, or the complete online course. The hybrid model of teaching gives you everything all put into one. Maybe this is what was needed all along to suit everyone’s needs and learning capabilities.

 In order for a hybrid course to be successful I think the student needs to know what is expected of him or her before enrolling. For some, they might think that this is an easy way out of going to class and doing a lot of work, but just like any other class, you do not want to mess it up. Also for an instructor who is teaching a hybrid course I think t hey need to know what is needed of them as well. A teacher can get just as lazy as a student. On the other hand, a teacher can also learn new teaching techniques that can be used in the classroom or online. For both the student and the instructor, they both need to be on top of their game so that this model can be a successful one.

 The idea of computer-mediated communication can be taken in so many different spectrums of the world, technology, family, education, and so on. It is a never ending system of networks that will only be continuously upgraded, progressed, and manipulated to form new areas of development that will benefit everyone that uses it. It is still unknown whether or not distant education takes away from community. People will always argue whether one is better than the other or vice versa. Know one will ever know for sure whether face-to-face, online, or hybrid models of teaching are more effective. This is also something that will be forever argued. The only thing that is certain now is that computer-mediated communication is needed in this day of age in some way, shape, or form. It affects every single person whether they own a computer or not. The technology is only going to progress further and only new advances are going to be made to make others lives easier, faster, and more convenient. With computer-mediated communication this world would not be what it is today, and education would not be what it is today. So whether or not face-to-face or distant education is more beneficial we still need computer-mediated communication every single day in our lives.

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