Socio-cultural Context for Online Learning:
a Case Study Viewed from Activity Theory Perspective

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Abstract

The complexities of digital age pose challenge to existing instruction technology theory as it applies to a distance learning environment. Through the lens of Activity Theory, this study takes a broad picture of an online course and examines the socio-cultural factors affecting the success of a distance course as well as their complex relationships. Interventions at the group and organizational levels will be explored to balancing local tensions emerged in the implementation of a distance course

Introduction

Computer-Mediated Communication offers great flexibility and accessibility in an online learning environment. Enormous elearning demands place distance learning from a previously marginal field to the central field of education(Moore & Anderson, 2003). However, distance educators and administrators increasingly realize the internet-supported technology offers much more than online classroom (Hara & Kling, 2000).In the most recent Handbook of Distance Education (DE), it is stated "....distance education holds the promise of better teaching, better quality of learning, and far better returns to public and private institutions for money invested education and training. None of this can happen without careful and deliberate planning, without a vision and clear policy." (Moore & Anderson, 2003). However, to plan distance education is not easy without a thorough understanding of the complex issues involved in DE. Previous research on online learning has placed much effort on comparative studies which usually produce "no significant differences" results or mixed results that have no practical values for improving the effectiveness of distance learning (The institute for higher education policy, 1999). A survey of current DE research literature noted several limitations: limited theoretical framework, failure to describe the complexities of the dynamics of online learning and lack of qualitative analysis of social-cultural factors of distance learning (Berge & Mrozowski, 2001; Holmberg, 1987; Saba, 2000).

There is a shift in educational research from focusing on how individuals function in different group or activity settings, to targeting the group itself as the unit of analysis (Dillenbourg, Baker, Blaye, & O'Malley, 1996 as cited in Bonk & Wisher, 2000). Schwen (2001) argues the prevalent instructional technology theory is often "implicitly or explicitly linked to a micro instructional theory" which are unable to explain the complexities of the digital age. This research will use Activity Theory (AT), a meso level theory, as a theoretical lens to illuminate how social, cultural and organizational factors implicitly or explicitly embedded in the structure of a distance course influence the successful online learning experience. AT examines how a group of people collaboratively work toward a common object within the context of a community that is mediated by *rule, tools and divisions of labor* (Engestrom 2001). From AT perspective, learning activities cannot be fully understood without understanding the social or institutional contexts for learning. AT suggests studying human practice in a social and historical context and emphasizes the interaction of human, social, technological and organizational behavior of human practice.

In this study, we examined systematically the socio-cultural factors affecting the success of a distance course and their complex relationships through the lens of Activity Theory. Using Activity Theory, this study also looked at the systemic tensions of distance learning unit and explored opportunities for refining existing practices to support a distance-learning course.

Methods

The study was an instrumental case study in that the overall goal will be to provide better understanding or theorizing of a complex system (Stake, 1994). The unit of analysis identified in this study was a well-reviewed distance courses in an accredited online MBA program. Two cases were examined in this study. Two courses were both core MBA courses. One course was Accounting Management and Decision Making. Another course was Strategic Marketing Management.

Semi-structured interviews were used as primary methods for data collection. The interview subjects involve with various stakeholders of the course, including the instructor, all students, technical support staff, and academic advisor. More than 30 participants were interviewed in this study for two to three times each. 15 students from Accounting Management and Decision Making and 13 students Strategic Marketing Management participated in this study. Four instructors, the chairperson, the technical support staff and other administrative support were also interviewed. The interview questions examined the participant goals in the course, social rules, program policies, allocations of responsibilities, and organizational operational process. concerned with the delivery of this course.

Meanwhile the researcher examined all online documents or offline that the researcher had access to for the study, including course syllabus, archived online asynchronous or synchronous discussion scripts, and email communications. In addition, the researcher observed the progress of the course through online course management system to grasp some emerging issues that occurred in the process of delivering the course. The documents and observations were used to provide more specific details of the historical or contextual information of the case and the people under study as well as to triangulate emergent data in the interviews and to "corroborate and augment evidence from other sources" (Yin, 2003).

Findings

Two cases that were examined in this study seemed to have different nature and course design. Accounting Management and Decision Making involved more numerical analysis, and Strategic Marketing Management course was more discussion-oriented with case-based learning as major instruction method. However, the socio-cultural issues emerging from the study were strikingly similar. The findings below were presented under several categories, including learner factors, instructor factors and course contextual factors.

Learner

The students were unanimous in confirming that the flexibility of online learning was the most selling point for them to participate in online learning. While in their mid thirties and forties, their life was facing a lot of responsibilities, and the flexibility seemed to be the most attractive feature of online learning compared with other educational options. Normally they had three choices for further education to advance their career, traditional full-time MBA, part-time evening MBA and video-based distance education. However, the busy work schedule did not allow them to take a leave from work to enter a full-time MBA program. To enroll in a part-time program was not flexible and efficient after a whole long day work. Video-delayed program lacked interactive discussions with instructors and fellow students. Online learning seemed to be most viable learning options for the participants in this study.

Activity theory suggests that the participants are often concurrently involved in several activity systems. Each activity system has its own rules, tools and division of labors. There will be conflicts and negotiations among different roles and rules of the participants (Engestrom 2001). MBA students were extremely busy working professionals. They were facing the expectations and responsibilities of multiples communities: work environment, online learning and family. Analysis of interviews indicated the tensions among different roles and responsibilities of online learner in their work, online learning and family activity systems appeared to be one of the core tensions in online MBA courses. At any point in their life, their behavior was a constant balancing and negotiation act. Two students' quotes below described the competing responsibilities of their life as an online learner.

By working under the "put out the biggest fire first" mentality. It's the only way to get through, constant re-prioritizing all the demands.

Probably it is just. I don't know if it is this course, if it is what else is going on. In my life right now, you know, school work, other classes, spring time coming up or what, the biggest thing for me in this course is just being time management. It is hard enough sometimes to get your own, finding time to do assignment. Having to find time that both work for you and four other people to get the assignment put together. That has been difficulty. There are so many assignments. Like I said, two or three postings a week that have been turned in. The greatest challenge is just time management.

The participants consistently noted their motivation to obtain MBA degrees for a complete package of their education and for a better job prospect. They unanimously seek online programs with good reputation to

ensure that their credentials were guaranteed. Several metaphors were used frequently by the participants to describe the importance of credentials, such as "check box approach", "company ladder", "punch the ticket". Thus, ranking became an important criterion for them to choose online programs because for them, good ranking means good quality of education and good job prospect. One of the participants in this study elaborated on the importance of reputation of an online MBA program.

> *I wanted to do MBA to have a better job prospect. I tried for admission for full-time MBA in top 3 MBA programs in US but didn't get admission. Then I started looking for distant programs that are reasonably priced for me and have brand name. Online program has the advantage of moving from one geographic area to another without abandoning the MBA program. From research in Business Week's website, I found Kelley Direct satisfies my criteria best and fulfills my needs. Hence I joined Kelley Direct MBA program.*

Instructor

Rather than viewing online teaching as a transformation from traditional classroom, the instructors of two cases still viewed online learning activity system as historically new development of traditional activity system. However, the introduction of new online tools caused disturbances in the instructors' beliefs about their roles in a traditional setting and thus made them to make adjustable actions. By trying to adjust to a new environment, instructor's philosophies and beliefs about online learning were reflected from several influences: cultures and communities of profession, historical influence of traditional teaching, perceived attributes of online tools and new rules and according adapting strategies.

The instructors expected to give online MBA students equivalent education than traditional students. The new activity system of online courses retained the same objective and teaching methodologies they used in traditional classroom. One advantage of online learning perceived by the instructors was that multiple identities of online students gave them a learning advantage than traditional student. For example, one professor from the Marketing Strategic Management course commented,

> *So our final assignment takes them right specific to their company and hopefully the outputs in their specific job and we try to set them up by saying the assignment on the final project is to make at least one implemental recommendation for an improvement and we encourage them to show it to other people in the company because they have to interview them in that context and that sort of bolsters their ability to take the stuff which is hopefully become less abstract in the course and apply it very close to home and hopefully to obtain professional recognition in-house and that has happened sometimes.*

The loss of social-contextual cues in the online activity system caused disturbances on traditional teaching process. Without the dynamics in a classroom, the instructors felt it is difficult to understand and engage students in the same way as in traditional classroom. One of the instructors commented on how he tried to use the explicit and exaggerated language to create a warm environment but perceived it as an imperfect way to do this in an online course.

> *Within the direct classroom there's direct relationship and it exists at different levels of intimacy, professional intimacy. Online you can sort of feign that and I always in email try to use, I learned this in '84, '85 when I was the MBA Chairman dealing with the MBA students that didn't have a class. Always I feel it's good to use warm language. So, it's not, the meeting is 5, it's I'd love to have a meeting with you tomorrow. It's to keep the language that you would never in direct verbal communication because it would be artificial but it warms a cold environment, right? But I'd like to find a way to warm the environment with more than the use of exaggerated language.*

Course Context

Online Discussion Rules

The findings from activity analysis suggested the there was a contradiction embedded in the rules of

online discussion, that is, the **mandatory vs optional** participation in discussion forum. It was observed that when online participation was mandated, the majority of the students tended to post for visibility. Their attentions were blocked on the participation grade rather than meaningful participation. When it was optional, there were few participants. Most students did not participate and attributed it to the reason of timing competitions. When asked whether an online discussion should be made mandatory to stimulate more interactions in an online course, one participant commented,

> *"I agree with it as well. But I don't think that's enough. If participation is made mandatory like in the marketing class vs. accounting class, true that most people will post on time, but more people post their comments about the topic instead of comments about others' posting. If it is optional, I think it mostly depends on how busy I am. For example, I am so busy with the marketing class and trying to catch up with the accounting class reading that it is very difficult to push myself to get involved in the optional online discussion in the accounting class."*

The findings once again suggested that the reality of online students, their extremely busy work and study life, constrained their active participation in online learning activities.

Secondly, findings also suggested that lacking of teacher's presence seemed to be one of the reasons that the discussion forum was not attractive to students. Some students indicated that instructor needed to be involved to argument and redirect the discussion to make it more interesting and refreshing so as to avoid the comments posted by the students reached the saturation of the complexities of the questions. The following quote illustrated the point that the presence of instructor in a mandatory discussion forum could facilitate meaningful discourse online.

> *Ii don't know whether I had mentioned my last course I used to take in UM. The instructor had kept 20% grade on the discussion ... what she had done was that she said she would read everybody's post and then she had said that you cannot be just posting yes or no such answer, you have to be thoughtful l... there has to be someone there to moderate the discussion right. This would do that in that case.*

Course structure and organization

Almost all student participants agreed on that "stay with the schedule" was an important rule for learning online. On one hand, this again implied the competing responsibilities of online learner which caused the difficulty in catching up with the schedule. On the other hand, the students noted that any unpredictable schedule change might cause disturbance on their study schedule and affect their learning performance. Many times online MBA students looked for regularity in course design, they preferred weekly based modular format, clearly specified deadlines and regular deliverables. To have structured course plan seemed to be important for them to plan ahead and ensure their participating in an online course.

> *Because if you slow done, you are going to be passed up. The course will leave you behind especially when it is in a hurry pace. That is something to think about, have twelve weeks. You almost jamming everything, you are doing your best to stay up with this, to absorb and to own the knowledge you are taking in. that is a tough thing to think about it.*

> *I wish there were more frequent assignments in this class since that would insure I'm grasping the material incrementally and on schedule. Assignments are a couple weeks apart and cover content from several chapters so it's difficult to know if you're understanding the content as well as needed since the assignments and quizzes are scheduled so far apart.*

However, the findings also suggest that there was a tension between the **structure** and the **flexibility** of course design. Overly structured online course might cause disturbance in students' activities. Within overall structure, the threshold of flexibility was also essential because this was the point that they chose online program. For example, several days time frame was necessary for an online exam so that it can accommodate individual differences on their work schedule. The tension of structure vs. flexibility was well illustrated in the quote of a student from Strategic Marketing Management course.

I think originally there were a whole lot more flexible than they are now. Now, you know, as you get into the MBA classes and I think as they've gotten more experience with some of the classes, it seems that they've gotten a little more rigid on you having specific dates and times that you have to have things done. In at least some of my classes, I've seen those to be, you know, it's not nearly as flexible as it was at first. You have, especially with a lot of group work. You know, you'll have a deadline that's pretty rigorous and in order to get going, you have to start ahead of time planning and, you know, meeting with your group and doing, coming together and doing different deliverables up front to put together the groundwork to create your final presentation, so I've found that lately it's gotten more just like a normal class. But you still do know up front what you have to do.

Online Community

Analysis of interview transcripts revealed that the students who participated in two courses had a very weak of sense of belonging to an online class. Instead, the sense of community feeling came from the group they worked with. For example, when asked whether he felt a sense of community in this course, a participant stated: "… I haven't exchanged notes or compare thoughts with others in the class. To me the class is [student name1], [student name2] and the professor." Another participant admitted that he had rarely interacted with any students other than the group members and teacher in this course. When asked whether he felt a sense of community, he stated, "Not really. I think maybe with the professor and our group, but not necessarily the other groups as much."

Many participants indicated the sense of community came more from their team than from the class. Sometimes the students interacted intensively with group members, however, their sense of community didn't go beyond the group community. Two students commented,

I think we're all going through the same thing in the course and in reading what the other classmates are thinking, whether it's different or the same, it kind of, yeah, it forms a kind of community, but I think the major community that we do form is with our own team members.

Frankly, not in this course. Even in other courses, the learning community didn't develop beyond the group members. Only in Quant course, professors used to hold lectures (literally) in chat rooms at specified times. That was the only real learning community experience so far.

Many students agreed that it was important for them to feel a sense of belonging to an online community because it provided them with socially supportive environment. The following quote demonstrated the perceived benefits of an online community.

I think it is very important that students feel they are in it together, for both emotional and academic support. It is not easy to get through this program since it is very demanding. And only students who are in the same program would understand the difficulties.

When asked to give an example of a class where they felt a good sense of community, many participants mentioned a course where they felt a strong sense of community in one of the chat rooms. An participant commented,

Yes, I had a decision analysis class with [instructor name] last semester that had a great sense of community. We had scheduled weekly class chat sessions. [Instructor] instructed and took questions from the class on the material. We also used the time to review assignments and ask questions. There was a lot of interaction with John, with our TA, and amongst the students. It did a lot for my confidence in learning the material and understanding the process, not just the solution. And it was good to know that other students had the same questions/problems I was having.

The online courses featured a weak sense of belonging to a class community among online learners. However, it seemed that the community existed at the small group level. Even so, as indicated by the students, the group community usually discontinued when the class was over.

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Teamwork

Majority of the participants indicated that in online learning environment, group work was valuable because the group brought different backgrounds and assets of the people together to share. As one student commented,

> *In this course [name] and [name] I am working with we worked together very well. Again it is neat to meet these GM people you wouldn't meet otherwise because GM is so large, so diversified, we work with people in very different areas that have very different responsibilities from what I have. We all bring different backgrounds and different assets in these groups. It is a great experience.*

Within a team, the students usually divided the tasks of one assignment and work on it, and then different parts were compiled together as one group deliverable. The requirement for the coordination on the tasks was high, which was in conflict with the efficiency-oriented feature of teamwork process. Contradiction usually occurred when long meeting time was spent on coordinating different opinions, especially when the issues were not related to the critical content but rather to the task-related issues. One participant commented,

> *The teamwork is at times very valuable at times frustrating. I will take the barco case for example. The final product was just one page. A lot of team issues were that you were kind of debating among yourselves what to present on that one page. It wasn't technical. It was more than just trying to present your idea, how to defend your own ideas … Sometimes time spends more on team related issues rather than course related issues. I was much preferred to have the ability to have my own response to work with a team to learn and then with our own response.*

Though students valued the experiences and lessons learned from dealing with different personalities (identities) in a team work, such alignment of different personalities (identities) can be difficult sometimes that it causes resistances on collaboration in online courses. The disturbances within teamwork were sometimes caused by the conflict or inconsistent views on quality standards about the group product. Specifically this kind of issues occurred in a team where majority team members had lower standards than minority. The following quotes represented two such examples.

> *Sometimes I've gotten, I've told somebody that, okay, you're going to be working on this part of the assignment and they'll come back with basically just crap and, you know, I'm not going to turn this in, so I'm left trying to take what they've given me and revising it to something that's at least legitimately good to be going to the professor and that's probably an advantage where you, if you were in class and you were able to get a better understanding of what people's capabilities were from just the basic interaction that you would have in class, it would really help out.*

> *There are problems with online learning. Participants post message board only for the purpose of assignments. Very few teams had real interactions or consistent interactions … Whenever we dialed up in the teleconference, and found out that there was not much to discuss (because we were not prepared). Most of the people look like … OK, when is this due and what is the format, then we started dividing our task, then after a while, people say, sorry, I have to pick up my children. Then the meeting is over. Very few people will sit down and ask each other, what you think of this question … "*

With highly efficient and task-oriented teamwork, conflicts develop between high-performance, task-oriented goals and the social-emotional needs of the participants. Participants indicated that their teamwork can mainly satisfy the task needs of the group instead of social need due their tight schedule.

> *We tried not to waste too much time chatting about non-class related subjects. Again, it all comes down to time spent on homework vs. time spent on the rest of your life. The faster we can divide the work and reach consensus on an issue the better.*

However, the participant indeed felt lack of opportunities to socialize with team members made it difficult to develop good group dynamics. In traditional classroom, people learn from body language and facial expression. In online environment, the loss of behavior cues created barriers for students to really get to know each other's personalities. The participants indicated that this kind of "knowing" is important because it could help with coping with different personalities to create a better atmosphere.

> *In a physical meeting, people usually come a little earlier. For teleconference, people always arrive at the exact time or only one or two minute difference. So this leaves little time for socializing. In addition, people were not familiar with each other and cannot see each other's body language. Even people can speak up, they are mostly superficial…Basically we don't know each other. We don't know each other's personalities. Some people are more aggressive and some are more conservative. If we can meet face-to-face, we would take this factor into consideration. However, if we cannot meet face-to-face, just by phone or internet, it takes longer to make an impression on that person. However, this course only lasts ten weeks. When you started to get a sense of his personality, the train already left the station.*

Conclusion

Through the lens of activity theory, this case study depicted a rich picture of online MBA courses in its activity context. The findings suggest that there are various facets of an online course that affect the performance of online participants as well as the success of the course overall. In reviewing the findings, it is not difficult to conclude that it is important to design a course that takes into the consideration of learner's social context, e.g. competing responsibilities, the commercialism of MBA education etc. Understanding these contextual factors is important for us to decode the complexities of an online course, the priority level of online students and their performance and behavior on learning tasks. Such considerations could result in the deliberate selection of course materials that do not over teach and structure meaningful learning experiences that really motivate online learners. Secondarily, the findings suggest that the culture of an online course seems to be temporal and it might be difficult to facilitate an online learning community within a short time frame. To facilitate the community building in an online course, there needs a structure to facilitate the building of a congenial social atmosphere either at the class level or at the cohort level, e.g. inter-group activities, social activities among cohort level. Finally, there seems to be a fine line between structure and flexibility. Well-structured and planned learning environment is desirable in online learning environment. However, online course design also needs to take into consideration the "flexibility" factor of online learning.

As a case study, the generalization of the results from the context of this study is limited. However, the strong socio-cultural themes that emerged from the study provide a framework for assisting distance educators and policy makers to make educational policies and practices for providing satisfactory education experiences for various participants in similar online learning environment.

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