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CREATING INTERNATIONAL ELECTRONIC NETWORKS OF PRACTICE BETWEEN U.S. AND MACEDONIA FINANCE STUDENTS

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ABSTRACT

Current technology allows students to more easily develop and learn within a community environment. Extending this community across borders provides opportunities for collaboration and exposure to international business issues. A semester-long project pairing American and Macedonian undergraduates aimed at examining interactions within this virtual team network provided several lessons for future team research.

Keywords: Online community, finance, SharePoint services, virtual teams

I.   INTRODUCTION

Research has shown that learning is most effective when shared by learners in a community environment (Kowch, E. and Schwier, R., 1997; Lenning, O. T. and Ebbers, L. H., 1999; Meisel, S. and Marx, B., 1999; Rovai, A., 2002). Creating a community for students to share their knowledge has been made easier by the array of internet-based technologies such as Blackboard and Facebook. Once the community is created students can interact using a variety of telecommunications methods from asynchronous threaded discussions to real-time chats.

One learning value offered by this community, as well as the communication methods themselves, is that it prepares students to interact in a global economy and allows them to see how to take shared information and attain mutual understanding in a cooperative activity. An additional value of online learning communities is that they can provide the ability to interact outside a student's "home borders" with students internationally (Higgitt, D. et al., 2008). This is particularly important for business student preparation since most businesses have a global presence (Healey, N. M., 2008).

Although online learning communities are available, many undergraduate students are challenged for time to interact with an estimated 77% of college students working part-time and 26% full-time (Block, S., 2003). This can leave little spare time for students since they are going from class to work to home during a day. The increasing expectation for using technology to interact leads to interruptions when trying to create a learning community. The student interactions, riddled with disruptions, can lead to disjointed exchanges and can lead to flawed decision-making (Kenway, J. and Bullen, E., 2000; Speier, C., Valacich, J. S., and Vessey, I., 1999; Speier, C., Vessey, I., and Valacich, J. S., 2003).

These interruptions and distractions however, are not unlike a work environment where an employee is faced with multiple projects and interactions taking place simultaneously. Learning to collaborate and coordinate in an online learning environment prepares students for the future of virtual teams.

To both provide a learning experience as well as explore the interactions and decisions made by undergraduate students in the United States when working on virtual international teams, a project that matched U.S. students with undergraduate students from Macedonia for online asynchronous communication was developed. Presented next is a brief review of the literature on learning communities, virtual interactions, and international experience, and a description of the project. This is followed by a case study description and a discussion of outcomes.

II.   REVIEW AND PROJECT OUTLINE

Virtual interactions occur on a daily basis. The internet allows us to send a message to someone down the hall or across the continent. The dynamic nature of networking allows us to reach geographically in real time or asynchronously to expand our level of knowledge. Building from Wegner's communities of practice (1998; 2002), Wasko and Faraj (2005) suggest an electronic network of practice where knowledge-sharing occurs primarily through computer-based communication and with a loosely connected group.

There are two types of knowledge – explicit and tacit. Explicit knowledge is the type shared in manuals, textbooks, and scientific formulas which can be easily transferred from one individual to another (Özdemir, S., 2008). Tacit knowledge, on the other hand, is not as easily shared because it is internalized in the individual, what is referred to as expertise (Heaton, L. and Taylor, J. R., 2002). The ability to share tacit knowledge in an organization between

employees is a valuable resource. The "war stories" and "water cooler" discussions are an important way to share tacit knowledge. An electronic (online) environment is a similar way to share the discussions as the old "water cooler" provided.

An environment where students can interact and share information can lead to the creation and sharing of tacit knowledge. Students have the opportunity to construct meaning from the content in an online community atmosphere by sharing dynamic information (Smith & MacGregor, 1992). This sharing of information in a university setting is considered a learning community whereas in a work environment it is more closely aligned with a community of practice (mutual engagement in a shared practice) (Lesser & Storck, 2001; Wenger, 1998). Creating environments then, where students can share, debate, and interact on information helps prepares them for the work place.

Shared knowledge, and experience in creating it, have become increasingly important in the last several years due to what Thomas Friedman calls the 'flattening of the world' (Friedman, T., 2005). Being aware of neighboring countries' differing cultures and regulations can positively affect interactions and cooperation (Ackerman, D. S., Gross, B. L., and Perner, L., 2003). Indeed, it could be argued that companies in other countries have typically operated in awareness of the differing cultures and regulations whereas American companies typically were less aware until more recently. Because of globalization, companies will be seeking competitive advantage over companies not previously considered "one of the major players" (Sirkin, H. L., 2008). Therefore, it is particularly important that U.S. business students are exposed to international business issues.

Although there is a push towards exposing students to cultural and procedural differences internationally, not all college students get the opportunity to see these differences firsthand. Creating a connection between business students from different countries using online technology provides the opportunity to experience electronic networking while exposing them to international issues.

Capitalizing on the electronic network of practice concept, two undergraduate finance-oriented courses, geographically dispersed, were taught in the fall of 2007. The first course was an upper division capstone for senior finance majors at a medium-sized U.S. university. The second course, taught by a U.S. faculty participating in a Fulbright fellowship to Macedonia, covered managerial accounting for sophomore students fluent in English.

The capstone finance course was organized around a case study framework, primarily based on a seminar format. The students, during the semester, reviewed and examined seven cases focusing on different areas of finance. The class was divided into seven groups, one group assigned to a specific company case. The seven parts of the course contained the same general format. First, the instructor lectures on the finance material related to the specific case. The instructor then initiates discussion among the students regarding the details of the case, including the situation facing the case protagonist and the objectives of resolving this situation. The class typically had one course session to complete the assignments corresponding to their group. The **case group**, the student group assigned to the case being reviewed, was responsible for a written case report, submitted to the instructor, and a formal presentation in front of their classmates. The **brief groups**, the student groups not assigned to the current case being reviewed, were responsible for a summary case report, submitted to the instructor, and a list of prepared questions for the presenting case group. Each case study entailed three to four class sessions, or approximately two weeks of calendar time, for discussion, preparation, and presentation.

To create the electronic network of practice, the U.S. students in their case groups were paired with Macedonian students in the managerial accounting course. Additional questions were added to each of the cases incorporating an international perspective. Appendix 1 provides the hand-out given to the U.S. students. The purpose of these added questions was to initiate discussion between the U.S. and Macedonian students. The questions followed the general topic of each case. However, since the Macedonian students did not have access to the specific case study text the additional questions covered basic subject matter intended to elicit their perspective as Macedonians. Each case group was required to initiate discussion with the Macedonia students using common collaborative software, Microsoft's SharePoint Services, using Discussion Points as a recommended format.

There were seven cases, and thus seven case groups, which focused on different themes that the students were required to explore. A description of each of the cases is provided below:

Case 1: The influence of social activism on business activities and objectives, and the challenges associated with obtaining financing to fund operations by small businesses and entrepreneurs.

Case 2: Differences in consumer demographics, buying patterns, perceptions about advertising, product awareness, and distribution channels.

Case 3: The roles of stock and bond markets, processes and resources for firm financing, and whether/how people invest money for current and retirement needs.

Case 4: The role of relationships in the workforce, e.g., entrepreneurs raising money, getting a job, employee-management issues, and employee expectations.

Case 5: The influence the European Union has now on markets, and the influence of the foreign currency markets on firms and consumers.

Case 6: The role of weather and utility rates on business and consumer decision-making, as well as the role played by the global warming debate and sustainable business practices.

Case 7: The influence of foreign markets, with a focus on exploring the outsourcing debate.

III.   METHODOLOGY

A total of twenty-two students participated in the U.S. case group (32% female and 68% male) whereas twenty-eight students represented the Macedonian contingent (54% female and 46% male). A site was made for each case group; seven cases and therefore seven sites were developed in SharePoint for each topic. In most case groups there were three U.S. students and approximately four Macedonian students. For each case group (see Appendix 1), the U.S. students used the questions from the text to analyze and evaluate the firm's situation. Additional questions were added to incorporate an international perspective with the Macedonian students.

IV.   DISCUSSION OF THE CASE STUDY

Although the rationale and infrastructure for creating the electronic network of practice was in place for the virtual interactions, the cultural issues as they relate to education differences caused the electronic network to crumble.

First, by Macedonian law, university students must be given the opportunity to take a comprehensive final that for all practical purposes replaces any grade earned in the course during the semester. As a result there is little incentive, other than not taking the comprehensive, for students to attend class regularly or do assigned projects. For example, while the Macedonian class had 27 officially enrolled, 48% took Exam 1, 33% took Exam 2,

and 19% took Exam 3. Attendance in class over the course of the semester basically mirrored these percentages. Therefore, an immediate challenge to the project was having enough motivated Macedonian students to participate.

Second, differences in the timing of the semesters also created a challenge. As is typical, the U.S. colleges start in late August and last around 16 weeks. Macedonian universities start fall semesters on October 1 and last 12 weeks. It was felt that a couple of weeks were needed to establish a rapport between the Macedonian students and their new U.S. faculty member so that by the time the project was initiated the U.S. students were well into their semester. This resulted in the U.S. students and their case presentations coming due sometimes soon after the connections were made. The U.S. students, trying to complete their presentations, would send very detailed and long messages, which often over-whelmed the Macedonian students. On the other hand, the remaining case groups had more time and an introductory session was held for the Macedonian students (in class) to access SharePoint the first time and send their first messages. The U.S. case groups, well into their semester and courses, did not always reply quickly, which made it difficult for some of the Macedonian students to remain engaged in the project.

Third, a compounding challenge was the timing differences in the semesters. The U.S. students used many electronic forms of communication: email and various message boards on a computer (i.e., Microsoft's SharePoint Services) as a primary form of communication. In sharp contrast, the Macedonian students rely almost exclusively on mobile phones and their text messaging capabilities. In addition, computers and laptops are not as ubiquitous in Macedonia among the general population or student population even as they are in U.S. Thus, when the U.S. teams did post messages in SharePoint, often there was a long delay before the Macedonian teams would reply. The long delays on both sides made it difficult to remain engaged.

V.   LESSONS LEARNED

Although the electronic network of practice collapsed, some important lessons were learned to take forward for future international experiences. First, an important issue for keeping the students engaged was frequent and convenient interactions. The U.S. has long been a leader in computer usage but has lagged behind most of the international community in terms of mobile phone use. The tools to communicate did make a difference in the frequency of communicating.

Next, the striking differences in educational systems also contributed to the failure of the network. In most European countries an end of term exam is common place with little value placed on attending lectures. This opposite effect in the U.S. creates problems in connecting the two groups. In the future, an option could be provided to give extra credit to Macedonian students for participating. This is an important consideration when looking at creating an international experience. Understanding how the educational system and then being able to create an incentive system would enhance the interactions.

Finally, the premise behind an electronic network of practice is excellent and would provide value to many U.S. undergraduate students. The implementation and network infrastructure though become the "deal-breaker".

Appendix 1: Project guidelines provided to U.S. students.
Discussion points for Bus 409-Macedonian (MK) student teams
NOTE: Where appropriate share your perspectives on the following questions and topics as you ask them of the MK students. Also, understand that you will most likely have to alter the wording of the questions and points you are trying to get across to accommodate differences in language, therefore, <u>do not</u> simply "cut and paste" the items below into SharePoint and ask for responses. Engage in meaningful chats. And lastly, feel free to let the conversations flow and expand as the opportunities arise. You have a chance here to chat with another university business student in a foreign country. Make the most of it!

Case 1: The Body Shop
- The CEO stresses The Body Shop's focus on social change and action.
     - How much importance should firms place on social issues? How should social activism rank compared to increasing shareholder value?
     - How might this view change for entrepreneurs and small businesses?
- The Body Shop needs to forecast its financing needs in the near future. Discuss your perceptions of how easy or difficult it is for small businesses to obtain financing for their operations. What sources are available in the U.S. and Macedonia for entrepreneurial financing?

Case 2: Coke vs. Pepsi
- Besides Coke and Pepsi *colas*, are the MK students familiar with the other products each firm sells, e.g., Coke's Nestea line of products?
     - Where do they buy them (the other product lines or the colas), i.e., grocery store, convenience stores, vending machines in schools, etc.?
     - How and where are they advertised, e.g., TV, radio, flyers, sport team sponsors?
     - How are they perceived by little kids versus college students versus adults, i.e., as "cool", too American, for older people only, etc.?
- What are the most popular similar products, i.e., if not Minute Maid OJ then what firm/brand (and located in what country) sells the popular line of OJ?
- p. 206 discusses changes in the beverage industry: Each side is to share what they feel are the most important or popular drinks among kids vs. college-age students vs. adults.
- Each side is to share how they think an entrepreneur or small business that wishes to get into his/her respective home market with a new drink or product that would compete against Coke and Pepsi should go about it. Be sure to address issues such as target customer profile and price-place-promotion components.
- In general, try to determine the challenges and opportunities Coke and Pepsi face now and maybe in the future as they try to have a presence in MK.

Case 3: Euroland Foods
- p. 305 mentions the firm going public: Each side is to describe their perceptions of how easy or difficult it is to list a firm on an exchange.
- Which stock market in the world is perceived to be the "best" or most prestigious?
- p. 307 mentions stocks, bonds, dividends: Each side is to describe the roles of these securities and dividends in the general public's wealth and retirement plans.
- In addition to or instead of using the capital markets for creating and managing wealth and retirement, what does the general public use and rely upon (in USA and in MK)?
- How do the MK students expect their answers to the above questions to change when MK joins the European Union?
- In general, try to compare and contrast the roles of the financial markets in USA and MK.

Case 4: Rosario Acero
- p. 430 mentions the role of relationships in the different businesses: Each side describe the role of relationships, family, networking, 3rd-party recommendations, prior relevant work experience, school pedigree, etc. in doing business and advancing in business or simply getting business done.
- p. 432 describes work hours, pay, and unions. Each side describe these, e.g., what is typical pay, hours in a work week, the role of unions, public perception of unions, etc.

Case 5: Carrefour
- Have MK students share their perceptions of whether joining the EU is worthwhile, how it is influencing what is happening in MK and businesses there, whether the original concept of the EU is "working," and what role the euro has in MK society.
- Each side describe the role the foreign exchange market and its quotes play in their day-to-day lives.
- In general, try to understand better the influence the EU has "over there" and the impact foreign exchange markets have on MK.

Case 6: Enron
- The case is about the role of weather: Each side describe the weather in their area, the role of A/C and heat and gas/electric supplies, e.g., how reliable is each, who receives it (Firms? Residents? Government offices?), how expensive is each?
- Each side describe attitudes about global warming and the role, if any, business (and individuals) is taking to address it.

Case 7: Yeats Valves and Controls
- p. 586 describes the role of foreign customers and markets: Each side describe the role of and debates surrounding 'outsourcing' in their respective economies.
    - What are the perceptions of the general public towards foreign-made products?
    - What are the predominant industries around Idaho vs. MK?
    - What are some emerging industries?
    - What are job prospects like for college-age students?
- How important is intellectual property in the USA vs. MK, i.e., is it protected by laws, do people 'trust' the 'system/markets' to protect them?

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