Collaboration: Leading and Learning by Example

Diane H. Parente
Associate Professor of Management
Sam & Irene Black School of Business
Penn State Erie
Erie, PA 16563 USA
dhp3@psu.edu

Janet Duck
Lecturer, Management & Organization
Penn State Great Valley
Malvern, PA 19355 USA
jmd226@psu.edu

Xin Zhao
Assistant Professor of Finance
Sam & Irene Black School of Business
Penn State Erie
Erie, PA 16563 USA
xuz12@psu.edu

John L. Fizel
Professor of Economics &
Director of the iMBA Program
Penn State Erie
Erie, PA 16563 USA
fzk@psu.edu

Abstract
In this paper the authors discuss a case study in which three instructors in disparate disciplines collaborate to enhance the experience of online MBA students. Collaborative behavior modelling of the faculty in our scenario is different from team teaching in that the transfer of the behavior to students is a critical element of success. While MBA students are expected to collaborate and work effectively in teams, faculty do not typically model collaboration in course design, delivery or evaluation. A collaborative environment is made more difficult by an online asynchronous program. This paper describes the experience of three instructors’ concerted effort to improve the student’s understanding of collaboration by modelling collaborative behavior in design, delivery, and evaluation. The paper identifies both direct and indirect examples of collaboration as well as lessons learned for instructors wishing to emulate this approach.

Keywords: online, collaboration, higher education, modelling behavior, case study

Introduction
Collaboration and teamwork are skills that are required in the workplace. Teaching these skills requires a blend of academic training and experience in teams and collaboration. Faculty are trained to work
independently and, unless they have specific expertise in group process, do not have skills in teamwork. Further, an online synchronous environment challenges instructors with opportunities for direct teaching of teamwork and collaboration.

Collaboration is defined as "a cooperative endeavor that involves common goals, coordinated effort, and outcomes or products for which the collaborators share responsibility or credit" (Austin & Baldwin, 1992). In this paper, a case scenario is presented in which three instructors in three different courses model collaborative behavior for their students. The setting is a large state-affiliated system with an internet based MBA Program.

In this paper the process of collaboration is distinguished from the content integration. In other words, while there are benefits to the integration of the content in collaborating on three courses, there is also benefit to collaborating and coordinating on the process. Business personnel, such as these MBA students, regularly work in teams within their professional environment. In these teams, the members must set common goals, coordinate their efforts, and provide outcomes or products for which the collaborators share responsibility or credit. The goal of the faculty is to model these processes within the online academic environment to help the students learn effective collaboration in their coursework and transfer those attained skills to their workplace. This paper focuses on the process of how collaboration among the three courses was accomplished, independent of the courses' content, and examines student responses to working within this collaborative environment.

Literature Review

Team teaching has been gaining momentum as a promising pedagogy in higher education (Helms et al., 2005). In fact, team teaching has many names and is often referred to as collaborative teaching, co-teaching, or cooperative teaching. Team teaching serves as a method to avoid teacher isolation, empower teachers, and encourage innovations. There are two distinct approaches in team teaching, and they are the interactive approach and the turn-teaching approach (Helms et al., 2005; Nead, 1995).

The interactive team-teaching is the “true” team teaching in the traditional sense. In this approach, two or more professors are in front of the classroom simultaneously. All the professors actively participate by commenting on the scheduled discussion topics, with lively interactive dialogue and debate (Galley & Carroll, 1993; Nead, 1995). The turn-teaching approach can also be called the "rotational team-teaching" approach. There are two scenarios in this approach: the individual professors either teach classes separately and will attend classes only when teaching their specific areas (Morlock, 1988), or all professors attend all classes, but only one professor presents independently with little or no dialogue from the observer partner (the professors alternate the observer and teacher roles in one class) (Flanagan & Ralston, 1983).

There are various forms of collaboration in a learning environment: faculty collaboration and student collaboration. Faculty collaboration can be defined by common goals, effort, and outcomes as noted (Austin & Baldwin, 1992, p.1). Student collaboration similarly occurs when students work together as a team to maximize their own and each other’s learning experience. In a team-teaching environment, it is common to assign teams projects that challenge students to apply knowledge from more than one functional area with an integrated solution approach. Student collaboration helps students to raise the achievements of the whole team, to provide opportunities to work together, and to build positive relationships in the team (Leon & Tai, 2004).

Team teaching can occur on a single course or multiple courses. The literature in both areas is diverse. An interdisciplinary course team taught by professors from sociology and drama departments was reported by Alexander and Sullivan (1996). Helms, Alvis and Willis (2005) addressed the need for MBA team-teaching case studies to integrate seemingly disparate functional disciplines. Geary and Rooney (1993) found that team teaching combining several disciplines would be an effective way to advance students’ intuitive thinking.

Team teaching can occur in a single geographic location (or academic unit) or multiple locations (or academic units). The former is very common for residency education programs and the latter is usually for
long distance learning. There are numerous studies in both areas. For example, Leon and Tai (2004) implemented a study in team-teaching residency MBA courses in which each professor provided individual expertise in finance and quantitative modelling. Roberts, et al. (2006) described the evolution and activities of the Faculty Online Teaching and Learning Community at Western Carolina University (WCU) in which faculty collaborated to develop online teaching support. Wang, et al. (2005) raised some design issues in a cross-institutional collaboration on a distance education course.

The general sentiment for team teaching is that if it is done correctly, everyone benefits from team-taught courses. Benefits have been reported for both professors and students where the process has been used. The novice professors can acquire team-teaching experience (Coffland et al., 1974), and the seasoned professor can hear fresh ideas from colleagues (Robinson & Schaible, 1995). Also, team teaching can lead to the creation of a more collegial and robust faculty, and provide the possibility of cross-disciplinary research and enhanced publication opportunities (Helms et al., 2005). Studies indicate that students experience a variety of benefits from team-taught course structure as well. Students in team-taught business courses felt better prepared for future business courses than their counterparts in traditional courses (Nead, 1995), reported improved teacher-student relationships (Wilson & Martin, 1998), and expressed a preference for team teaching over the traditional teaching method (Hinton & Downing, 1998). Benjamin (2000) found improved student learning outcomes from reflective and collaborative teaching. Team teaching also helps the students to build teamwork and improve their interpersonal skills (Johnson et al., 2000). Another benefit of team teaching is combining a mix of teaching skills and styles. Furthermore, team-taught students experience multiple perspectives from different disciplines (Wilson & Martin, 1998).

While team teaching is similar to collaboration, the transfer of collaborative behavior is more abstract than the actual modelling of collaborative behavior. Transfer of these behaviors is critical (Valli, 1989).

The Case Scenario

The case scenario occurred in term three of an eight term online MBA program and was eight weeks in length. Students were part of a cohort-based program. Thus, all students took the same courses at the same time as they began and progressed through the program. Students were enrolled in three courses (Finance, Organizational Analysis and Strategic Analysis) that had a common deliverable and a common residency experience at the end of the term.

The students were a diverse group of experienced professionals. The 66 students had an average age of 32 years with 26% being female and 21% minority, and an average of seven years of work experience. The students resided in 24 different states and 5 countries. The undergraduate majors of the students included, but were not limited to, business disciplines, engineering disciplines, math, biology, chemistry, library science, sociology, psychology, and journalism. Some students worked in Fortune 100 or Fortune 500 firms, some worked in small entrepreneurial firms, some worked in multinational firms, some worked in local companies, and some worked in services or manufacturing or agriculture or the military. Yet all had the need to learn the collaboration skills that would be modeled by the faculty in this three course term (Grossbart, Carlson, & Walsh; 1991).

Instructors collaborated in the design, delivery, and evaluation of the term and the courses. The collaborative behaviors in design, delivery, and evaluation were separated into direct and indirect modelling examples. For the purpose of this paper, direct modelling is described as a display of behavior by the instructors intended to simulate collaborative behavior. Indirect modelling is the output of collaboration. In indirect modelling, students do not observe collaboration but infer its presence through jointly produced outputs.

Appendix A is a recap of the actions taken by the team of instructors in design, delivery, and evaluation of the term and the three courses. Here is one example. At the beginning of the term, the instructors jointly convened a virtual class session (using Elluminate Live! or E-Live!) to introduce each instructor and outline the course content for the term. The clear message to the students was that the instructors had jointly worked to design content and outcomes. The instructors continued their joint work by scheduling virtual class sessions throughout the term so that no more than one instructor held a session in any week.
of the course. Later, the faculty offered another joint session to finalize the student team deliverable and prepare for an integrative residency experience. This is a direct model of collaboration for the students.

The instructors also worked together to design a common deliverable or output for the term. The deliverable is a strategic analysis of a firm and the industry in which the firm operates. Student teams were instructed to evaluate both the firm and the industry from a financial, organizational, and strategic or market perspective. The theoretical principles using perspectives from each of the three courses were introduced throughout the term and students were taken for a company visit in the seventh week of the 8-week term. The final deliverable for the term tightly integrates the requirements from each course into a single and seamless document.

The instructors also took advantage of every opportunity to indirectly model collaborative behavior. The construction of a joint deliverable demonstrated to the students that there was a great deal of time put forth by the instructors to form a seamless product. The outline of the final deliverable was color coded by course and a corresponding grading sheet was given to the students early in the term to give them an idea of what the final product would look like. The collaboration was evident in that the course-related materials were completely integrated into the deliverable, and not sectioned off into individual course content. Also, every opportunity was taken by the instructors to ask questions about each aspect of the collaborative process. Further, there were numerous opportunities, via discussion boards and individual ELive! sessions for the instructors to indirectly demonstrate that they were aware of the topics and assignments in each other's classes. In that way, the instructors were using the online environment to indirectly model collaboration.

Did the modelling of collaboration work? Was the behavior modelling transferred to the students? How did students respond to this unique course delivery system? In the next section, the authors present a summary of the student responses to the actions of the instructors.

Collaboration as Expressed by Student Feedback

Students were asked to provide feedback concerning the collaborative efforts of the faculty in a course online discussion board. Overall, student feedback provided fair and thorough criticism of the faculty efforts to integrate courses. Student feedback included both positive and negative responses. However, positive experiences were more widespread.

The most frequent positive comments can be classified into three key topic areas: 1) the student’s ability to gain a comprehensive view of the course topics, 2) the student’s ability to transfer knowledge to their work environment, and 3) the enhancement of managerial and workplace skills.

The most prevalent feedback from students stated that, due to the collaborative nature of the courses, they were able to gain a “complete” view of the course material including the strategic, organizational and financial framework. Students felt that this broadened perspective added value to the learning outcomes from each course and also showed direct relevancy to their professional experiences. Representative student comments in this topic included:

The 'bigger carrot' for this term is overall increased knowledge based on the integration of these three courses. By collaborating, the three courses the instructors are setting us up for greater success down the road. The collaborative perspective allows us to view strategy, organization and finance from a holistic perspective.

The course collaboration appears to be well orchestrated among the three instructors. The current integration plan appears to be fitting well for the program and for student learning, these three courses fit together into a logical "whole", this will make transfer of knowledge logical and sensible.

The keys to success are experience and a comprehensive knowledge base. The collaborative nature
of these courses allows for a comprehensive analysis of problems and potential solutions."

The student benefits gained in this term were in direct response to the overall intent by the instructors. By integrating course content through class assignments and lesson concepts, the instructors presented a broadened view of the course material that discussed interlocking pieces rather than single functional silos.

Based on the student feedback as noted above, the collaboration and integration efforts of the instructors allowed students to gain a comprehensive view of the strategic, organizational, and financial perspective of the organization. The benefits of collaboration were clear.

Secondly, the students felt strongly that the transfer of knowledge to their work environment was directly apparent and that course concepts were easily applied, due to the integrative nature of the courses. Representative student comments included:

It seems that the 3 instructors have planned how the courses will interact and they work in conjunction with each other. This process has allowed us to gain knowledge and apply this knowledge to other courses in the program. More importantly, this information is transferred logically to our professional arena.

Due to the integration of courses it will be easier to put things in perspective and to apply this knowledge to the residency and to our real world.

These three courses are setup well and they integrate the background knowledge that we have learned to date. Due to this collaborative nature of teaching we can have better perspective on the way that organizations do business.

Understanding collaboration will make our jobs easier and will provide us with flow and consistency of information. In other words, instead of the instructors giving us pieces that don’t quite fit, they gave us the pieces and challenged us to find ways to put the pieces together. Collaboration was done right! The big picture somehow became more apparent.

Based on these comments, students were able to find a direct partnership with the course concepts and their professional work environment. The instructors’ intent in this regard was to help the students appreciate the theoretical concepts in the curriculum while realizing the transfer of information to their professional experiences. The knowledge transfer of collaboration was successful.

Finally, student comments indicated that the collaborative learning environment provided the opportunity to develop managerial and workplace skills related to team dynamics, flexibility, respect for differing perspectives and change. Student comments included:

By teaching the course content in a collaborative nature, the instructors helped us to gain a comprehensive perspective of business processes. This knowledge will prepare us for future management opportunities.

Flexibility and adaptation are key competencies of successful managers. The collaborative nature of these courses has allowed us to grow in this area.

We respected and appreciated the instructor’s intent to integrate, therefore reinforcing the importance of collaboration both in the classroom and in the workplace.

Overall, student feedback indicated that tangential skills were gained by observing the collaborative deliberations, actions, and outputs of the instructors. The collaborative behavior was transferred to the students.

The collaboration of the instructors also presented some challenges for students. Feedback in this area cannot be easily categorized, as the student comments were varied and presented disparate viewpoints.
Overall the feedback addressed issues such as “uneasiness” with the nature of integration in the academic setting, differing student performance in the classes within the term, uncertainty with the process of integration, differing learning styles and practical application to the work environment. Student comments included:

I think one of the challenges with courses designed collaboratively is to keep up with three different schedules and requirements as the integration among the courses, can be quite confusing.

The collaboration of courses appears to be fitting for the program and for student learning. However, it is yet to be seen if it can be as effective in practical terms as it is on paper.

I am anxious to see how the tight integration among the three courses will play out.

The integration among the courses might start to get a little confusing during the term. Professors and students must ensure that there is clarity around what is and isn't due and how the courses dovetail with each other.

Based on personal learning styles, some students may find this style of teaching distracting and non-productive.

I view the idea of integration as a potential “pinch” area. For example, I have a harder time with one of the courses than I do with the other two courses. I would hope that my performance in this class will not hinder my performance in the other classes.

In summary, students felt that the collaborative nature of the courses allowed for a broadened view of the course material, a relevant and positive correlation between the course concepts and the “real world”, and the opportunity to enhance their overall workplace skills. Students felt that the collaborative nature of the courses allowed for a thriving learning environment that allowed for increased participation appropriate for graduate level learning. The challenges of the collaborative approach seem to pertain to the unfamiliarity of an integrative learning environment rather than to the process and outcome of the learning experience. A new and different learning environment often creates such anxiety. Thus, it appears that instructor collaboration has been successful and, if used regularly, could be even more successful since continuity of collaboration techniques would mitigate or overcome the unease stemming from a one-time application of this unique teaching methodology.

Discussion

The benefits of collaboration in the business environment are clear in terms of providing a common direction for the employees and the business unit. However, the ways to teach these concepts are not so clear. Modeling is one way to encourage students to engage in appropriate collaboration behavior.

Some of the research in collaboration is revealing in terms of what is expected in the education and the business arena. Valli (1989) talks about four transfer of learning problems and the collaborative arrangements to overcome these problems. Although the setting was a primary school and not a university, the study introduces the notion of transfer of learning as an outcome of collaboration.

Roberts et al (2006) discuss the creation of faculty support mechanisms to prepare faculty to teach in the digital classroom environment. This collaboration is among faculty and provides a large dose of support conceptually. However, it does not necessarily model the collaboration desired for students in the workplace.

Helms et al. (2005) focus on the virtue of integrating disparate courses to show how various disciplines interact. This is especially important in the MBA core. The Helms study was in a traditional residential instruction environment.

Moving to the virtual environment, Eveleth and Eveleth (2003) discuss the use of on-line collaborative activities to develop the application of dialogue skill. They note that dialogue skill is most needed by business managers, cross-functional team members, and boundary spanners who need the skills to cross
between and among departments or functional work groups. Development of such skills supports the modeling of collaborative behavior.

Jasswalla & Sashittal (1999, p. 81) discuss the virtues of collaboration in a business environment. Collaborative behaviors emerge in organizations when the participants agree on a common agenda, share concerns and power, and commit to building trust. The authors also report that such collaborative behaviors are a result of intrinsic motivation and exist within environments of experimentation and learning. We can conclude that environments that promote risk-taking and tolerate failure will promote collaboration.

Thus, the environment created in the case scenario would support the Helms et al. (2005) notion of integration while a further expectation of success in the use of online collaborative activities is anticipated by Eveleth and Eveleth’s work (2003). Moving the discussion to the cross-functional business arena, the environment of the case scenario is a safe one for students and does, indeed, both promote and tolerate risk-taking, thus fulfilling the expectations of Jasswalla & Sashittal (1999).

In conclusion, our case scenario fosters collaboration and models collaborative behavior as suggested by the literature and confirmed by our study. These skills are critical to those in the increasingly virtual business world. Our case not only forces students to collaborate in an online environment but, in a more subtle way, demonstrates the finer points of collaboration that are carried out by the faculty. Students who are exposed to this multi-front approach to the adoption of collaborative behavior, assimilate the tools and techniques of collaboration more quickly.

**Hints for Successful Collaboration**

If you would like your students to collaborate among themselves, you should think about collaborating across courses between instructors. Course individuality should be maintained but every opportunity to collaborate should be visible to the students. Ensure that students clearly understand that they are taking multiple classes that have points of logical intersection. Present yourselves as a team – initially together. This will send a more powerful message than just telling the students that you are working together. Explain and show how the courses have common goals. Offer distinct examples of coordinated efforts between instructors. Provide one or more joint products derived from the content of both courses. Create a joint grading system for some course elements where each instructor does an individual assessment of the student work but a single grade is determined from a pre-defined weighting of the instructors' evaluations. Also, it is much more convenient if the student teams are the same across classes. Last but not least, remember that it is not “what you say” but “what you do” that will truly allow you to “lead and learn by example”.

**References**


Appendix A Examples of Collaboration Modeling

Design

Direct
- Integration of course content
- Review of “what worked and what didn’t” from previous classes
- Design of residency content/deliverables
- Placement of course assignments
- Joint course final deliverable and grading sheet
- Use of same peer evaluation sheet

Indirect
- Course Format/Verbiage
- Balanced level of workload
- Equitable balance of synchronous vs. asynchronous learning
- Shared emphasis on teamwork and collaboration

Delivery

Direct
- Joint introductory Elive! session
- Reference material from other courses
- Joint presentations during residency – “live case study”
- Staggered E-Live! sessions

Indirect
- Reference courses throughout delivery
- Improved quality of course content
- Integrative student discussions on message boards

Evaluation

Direct
- Shared final term deliverable
- Shared grading sheet
- Shared peer evaluation form
- Uniform instructor evaluation
- Use of technology for grading purposes

Indirect
- Comprehensive course review from students
- Fair student evaluation of integrative concepts
- Improved response time from instructors

Manuscript received 28 Feb 2007; revision received 25 May 2007.

This work is licensed under a

Creative Commons Attribution-NonCommercial-ShareAlike 2.5 License