

Teaching Tip

An Introduction to Collaboration with SharePoint for First-year Business Students

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ABSTRACT

The need for collaboration skills in today's market is increasing, with more businesses looking for ways to streamline communication, improve innovation, and share corporate knowledge. Students at the beginning of their college careers have had numerous opportunities to work in groups, but very few opportunities to engage in true collaboration. This Teaching Tip provides an approach to teaching collaboration as part of an Introduction to Computer Information Systems course, and incorporating it into course work so students can begin to develop the skills they will need for workplace collaboration. Initially, students tend to see collaboration and cooperation as interchangeable terms; the approach outlined here focuses on the collaboration concepts of content sharing, feedback, and iteration. By applying these concepts and using a collaboration tool like Microsoft SharePoint, the instructor can guide the students to understanding true collaboration.

Keywords: Collaboration, Collaboration Exercises, Group Assignments, Feedback, Iteration, Content Sharing, SharePoint

1. INTRODUCTION

In today's global economy, it is increasingly important for employees to have strong collaboration skills; "sharing information and expertise can be critical in driving both individual and organizational success" (IBM, 2008). Web 2.0 technologies are increasingly being used as strategic business tools to connect employees, customers, and suppliers, and the student who enters the job market with a solid understanding of collaboration will have an advantage over other job seekers (Sendall, 2008). Even in technical positions, soft skills, including collaboration, are valued in college graduates (Marsan, 2009).

Collaboration is the practice of two or more people working together to create a single end product; that product may be a design, a paper, a concept or some other result, but with collaboration the end product is always the result of the combined input of everyone in the group. Numerous products facilitate sharing of information over the internet, but information sharing by itself is not sufficient; true collaboration requires that students learn to work together in creating one deliverable that is the product of all members of the team. When asked about group projects, students in an introductory business class will quickly confirm that most of their group work does not result in a single deliverable developed by the entire team, but rather a merger of individually prepared components of the assignment. This is the pattern we address in teaching collaboration concepts – moving from combining parts into a single entity to actually

creating that entity as a whole, with contributions from every team member. While collaboration is possible without the use of a software product, the approach presented here uses Microsoft SharePoint, and would work with other collaboration tools as well. Images are provided to clarify how SharePoint supports the concepts, however the intent is not to present a SharePoint tutorial, but rather an approach, using specific assignments, to teaching the concept of collaboration using SharePoint.

2. METHODOLOGY

2.1 Making the Case for Collaboration

Before focusing on the mechanics of any collaboration tool, we discuss the concepts of collaboration in the classroom. As Charles Waltner (2009) states, "simply "planting" networking tools is not enough." Collaboration activities within an organization require "a concerted focus on building a culture of collaboration" (Waltner, 2009). The following exercises demonstrate how a group charged with a task could accomplish that task much more effectively through good collaboration practices. In both exercises the students are working face-to-face without any particular tool, building a preliminary understanding of the benefits of collaboration and setting the tone for even more effective use of a collaboration tool and its features.

Exercise 1: This exercise facilitates a discussion on good collaboration by having the students observe the drawbacks of a poor collaboration process. The class

identifies several problems at their university that they would like to solve collaboratively. Usually 3-5 good options are presented; however, the issue of on-campus parking works well and allows everyone to provide some input. The instructor should divide the class into groups of 4-5 students so that the exercise can be completed fairly quickly, leaving sufficient time for in-class discussion. The students are not permitted to talk and each has only one opportunity to provide input before submitting their solution.

The exercise proceeds as follows: one student in each group will write his or her thoughts regarding a solution to the problem on a piece of paper and then pass it on to the next student until each student in the group has had one chance to record their thoughts. The instructor will then collect the responses, and read some of them to the class. As responses are read, students may think of additional solutions or variations of the proposed solutions but will have no chance to contribute further – the solutions cannot be modified. Whereas good collaboration includes iterations, feedback, and communication (Kroenke, 2009), this exercise does not provide any of those; communication is limited, students receive very little, if any, feedback on their solutions, and there is no repetition or cycling back through the process – no iteration – to allow for improvements. The instructor can emphasize how the solutions might have been improved if everyone had the opportunity to read the document several times and enhance the solutions based on feedback received each time. Students will see how allowing for multiple iterations of working through the problem will result in solutions that are more thoroughly developed.

Exercise 2: This exercise is also used for introducing collaboration concepts, focusing on the content-sharing and goal-setting aspects of collaboration. Students are required to gather information as a group, but do not have clearly established guidelines on how to collect the information, how to manage multiple versions of the information, and where to store it – issues that frequently arise regarding business data. First, students are assigned a group number; three or four other students in the class will have the same number. Upon the instructor's signal, students have two minutes to find and talk to the other members of their group; they have no instructions or guidance regarding what they should discuss.

When two minutes are up, the students return to their seats and are instructed to use the assignment sheet (see Appendix 1) to record each group member's first and last name, dates and times that they can all meet weekly for the next six weeks, and the role that each member will play in the group (chair, vice-chair, recorder, time-keeper). Each student must sign the sheet, accepting their role. The instructions indicate that each group will turn in only ONE version of the sheet, so all group members must sign the same sheet, and all information must be recorded on that sheet. This criteria is frequently overlooked until at least part-way through the assignment; students will each start recording information on their individual sheets, resulting in multiple (and frequently inconsistent) versions of the same information. This emphasizes the importance of a single version of information, a central place to store it, and a method for controlling it. The assignment sheet represents

the document library, picture library, group site, or other shared data repository available in SharePoint.

Students may NOT leave their seats during this phase of the exercise. Once they realize they need a single complete version of the information they get creative in how to obtain it and pass it on. Students will raise their voices, send phone calls or text messages, hold up signs, and use other methods of communicating across the room. As papers are passed around for signatures, the instructor will occasionally intercept one, demonstrating what happens when the repository of information is not secured or when communication methods are unreliable (Reif, 2008).

Once all teams have indicated that they are finished, the instructor can present the sheets for viewing by the class. Students see immediately how some teams turn in multiple sheets that contain inconsistent information, or a single sheet that might be incomplete, especially if it's one that was intercepted by the instructor. This exercise emphasizes the concepts of sharing and storing content, communicating with other team members, and developing a deliverable that includes the work effort of each team member. It leads directly to an introduction to SharePoint as a collaboration tool that will facilitate the practice of these concepts and eliminate the problems that were experienced during the exercise.

2.2 Introduction to SharePoint

Once students see the need for a secure method of controlling and sharing information, the next step is to familiarize them with the SharePoint structure and hierarchy, including navigation methods, sites, lists, and libraries. A SharePoint Scavenger Hunt will accomplish this objective. Prior to assigning the activity, the instructor will post videos, create student groups and related group sites, and post calendar entries and a survey on the instructor page in SharePoint. The students are instructed to edit their SharePoint account information, and to visit and contribute to the content areas that the instructor has posted. The Scavenger Hunt is intended to familiarize students with some of the features offered by SharePoint and to give them some practice with the navigation; following is an example of some of the activities that might be included:

1. Go to the home site and watch the "Add your Data" video. This video is also available at: http://media.pearsoncmg.com/ph/bp/bp_mylabs/sharepoint/videos/addingdata.htm
2. Click on your user ID in the upper right corner of the screen, and click on My Settings to edit your account data. Add your name, e-mail, and your major under the department heading.



Figure 1. Settings Menu

3. Go to your Instructor's site and review the calendar. When is your first SharePoint Deliverable due? Make a note of this for Step 5.

13 5:05 PM Chapter 3: Information Systems for Competitive Advantage	14	15 5:05 PM Chapter 3: Information Systems for Competitive Advantage 11:55 PM SharePoint Tutorial: Chapter 1 - Getting Started	16
20 5:05 PM Chapter 5: Database	21	22 5:00 PM Chapter 2: 2007 Tutorial	23

Figure 2. Calendar Showing All Entries by Month ("Calendar" Format)

4. Complete the SharePoint Introduction Survey on the Instructor's page.

COB204 Student Survey:

Have you ever used Sharepoint, prior to this class? (Check if "Yes")

What are your initial thoughts about Sharepoint? *

It seems confusing

It will be useful in sharing information with my team

I think once we've used it for a while, it's value will become apparent

I get it, but don't think it's that useful

What is your major? *

CIS

Marketing

Finance

Accounting

ECON

HTM

Management

What are your thoughts on the topics we've covered so far in COB204? *

Figure 3. Survey Showing a Variety of Question Styles

5. Go to your Group's site and create a unique thread under the "SharePoint Scavenger Hunt" Discussion Board. Use your full name as the name of the thread. Post the following information in the thread you just created:
 - a. Your Group name (listed in your group site).
 - b. Due-date of your first SharePoint assignment (from your instructor's calendar).
6. Reply to your thread with the following:
 - a. List one video from the home site (i.e., CIS&MS) that you think may be useful.
 - b. Identify one of your instructor's favorite links listed on your instructor's site. Each link will take you to a website for a different state. List the favorite attraction and the state where it is located.

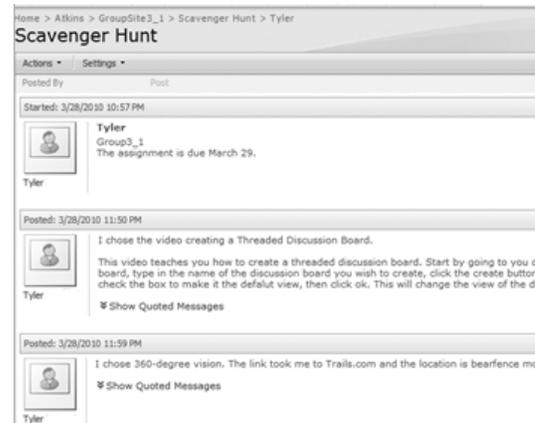


Figure 4. Discussion Thread with Two Replies

Upon completing the scavenger hunt students should have a better understanding of some the available functionality and the mechanics of how to use SharePoint for sharing information within their groups. This basic knowledge of the structure and navigation of SharePoint is critical for them to begin using it for collaboration.

2.3 Simple Group Collaboration using SharePoint

Once the students are familiar with the basics of both collaboration and SharePoint, they are ready for the first collaborative exercise in SharePoint, addressing four items: "What is Collaboration?", "Describe the role of feedback and iteration in collaboration", "Describe a team project that is cooperative and not collaborative", and "Name three drivers of effective collaboration" (Kroenke, 2009). The items could vary but should reinforce the concepts of collaboration.

SharePoint groups are set up with ten or more students to ensure the use of the tool and minimize the use of face-to-face meetings. Each group determines how to complete the assignment and where to capture and store their answers; many groups will use a SharePoint discussion board to make this decision. They may choose to create a wiki page or a Word document, both of which can be edited by all group members, to capture a single version of their answers and store them in a central location. A wiki page will provide historical information, showing who made changes and when; use of a Word document will also introduce the concepts of Check Out/Check In, and the value of being able to control stored content when multiple people have access to that content.

Type	Name	Modified By	Modified
	Describe a Team Project that is Cooperative	Laura Atkins	7/5/2010 10:16 AM
	Describe the Role of Feedback and Iteration	Laura Atkins	7/5/2010 10:16 AM
	Name Three Drivers of Effective Collaboration	Laura Atkins	7/5/2010 10:20 AM
	What is Collaboration	Laura Atkins	7/5/2010 10:17 AM

Figure 5. Wiki Library with Four Wiki Pages



Figure 6. Document Library with One Word Document

To encourage use of feedback and iteration, each student is required to make multiple postings, one of which must be in the form of feedback. In addition, students are required to be active on their SharePoint site at least three different days of the assignment period. The content of the answers is not heavily graded; students are evaluated individually on their effort to collaborate in developing those answers.

2.4 Classroom Collaboration using SharePoint

A few other collaboration exercises may be used in a semester to help the students further refine their online collaboration skills using SharePoint. One option is to go beyond a group exercise and have the entire class collaborate as a whole. A SharePoint blog is a good way to achieve this. The professor can post pictures and/or questions in the blog, and then students collaborate using blog comments and/or postings to answer the questions. Students' final answers could be captured using a survey. For example, the instructor could post photos from various landmarks, and ask students to identify the state in which the photo was taken. Both the instructor and the students provide hints in the comments, which support a collaborative effort in determining the location of the landmark.

2.5 Going Further with Additional Exercises

Once students are familiar with SharePoint, it could be incorporated into many group assignments, from simple surveys for data collection, to database modeling or business plan development using shared documents, to developing web pages. Instructors could modify current group assignments by adding the requirement to use SharePoint. One advantage to this is that the instructor can clearly see how much time each student spends on the site – and thus, presumably, on the assignment. Some potential ideas include:

- a wiki study guide to which the students contribute answers to study guide questions
- a semester-long blog in which the instructor posts links to sites that are relevant to what's being taught in class; student post comments on the value of the site or a link to a similar site
- a research assignment that requires students to report their findings in a Word document that is stored in SharePoint
- a spreadsheet that is developed collaboratively and stored in SharePoint.

The use of SharePoint eliminates mandatory group meetings since each student can access it on their own; students will have the opportunity to begin the assignments without the complication of trying to meet as a group. The instructor does not have to develop new assignments, but simply needs to change the delivery method to use a SharePoint feature.

3. CONCLUSION

Companies see collaboration tools and the associated improvements in productivity and decision-making as key to their corporate strategies (Alter, 2008) and have found that “ultimately the members of an organization must want to collaborate with each other and also know how to best do so.” (Waltner, 2009). To help students improve their collaboration skills, we have been using online collaboration exercises for several semesters. The exercises and suggestions provided here help to move students away from the practice of cooperating in a group by splitting up various tasks and then reassembling individual parts into a finish product, to the practice of actually collaborating as a group, expanding upon and improving what others have contributed. Students experience how to provide and receive feedback, respond to it, and cycle through several iterations of the assignment, resulting in a more accurate, more complete result. By introducing the concepts of collaboration before introducing the collaboration software, the instructor prepares the students to see the value of the software and what it can do. Groups can measure individual participation by using the document modification history, and after finishing an assignment that results in a completed collaborative document, students have gained an appreciation for the process and the information that SharePoint captures, such as modification history and content changes. The mechanics of the software can be taught using the medium the instructor chooses – books and online tutorials are available; instructors provide the framework for using the software effectively by assigning group work that requires students to work together over time to produce a finished product. By helping students first see the need for and benefits of collaboration, then providing ways for them to practice collaboration, instructors can be on the front lines in addressing what is becoming an increasingly valuable skill in the marketplace.

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APPENDIX 1 Worksheet for Exercise 2

Do NOT turn this page over until instructed to do so by your professor.

Leave this paper on your desk – do not turn it over or take it with you.

Group # 1

You have been assigned to a team of students to complete an exercise in collaboration. Your team number is the number printed above.

When instructed to do so, your first task is to find the other members of your team. You will have an opportunity to meet with them for two minutes. During that time, you may exchange any information with them.

APPENDIX 1 Worksheet for Exercise 2, continued

COB204 Computer Information Systems

In-class Activity – Collaboration

You must remain in your seat for this entire exercise. It's fine to talk or use any other means to communicate with your team members to complete the tasks below. You may not shout and if the noise level becomes too loud, your instructor may require everyone to remain silent while they complete their work.

Each group is responsible for submitting one copy of this page with tasks 1-4 completed. The extra copies can be used as worksheets.

Task 1 – Print the first and last names of your group members on the lines below:

Task 2 – As a group, decide upon a time that all of you can agree to meet for an hour, once per week, for the next six weeks. List the six group meeting dates (not day of the week) and times:

Task 3 – Your group needs a Team Leader and a Secretary. Decide who will fill each of these roles and identify a unique role for each of the remaining team members that will help your team accomplish its goal. List each role and who holds it in the space below.

Role: _____ Held by: _____

Task 4 – Each team member must signify their acceptance of the role above so that they can be held responsible for completing their work. Have each team member do this signing their initials next to where their name is listed for Task 3.

When you're finished, let the professor know by holding up your group's completed page.



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