CHAPTER 4

Writing Collaboratively

Every document calls for a unique kind of collaboration.
The two people shown in this photo are using a touch table to work with digital images. A touch table is typical of new technologies that streamline the process of collaborating in technical communication. The explosive growth of social media over the last decade has greatly expanded the scope of workplace collaboration, reducing earlier barriers of time and space. Today, people routinely collaborate not only with members of their project teams but also with others within and outside their organization, as shown in Figure 4.1.

But how exactly does this sort of collaboration work? In every possible way. For example, you and your project team might use social media primarily to gather information that you will use in your research. You bring this information back to your team, and then you work exclusively with your team in drafting, revising, and proofreading your document. In a more complex collaboration pattern, you and your team might use social media to gather information from sources around the globe and then reach out to others in your organization to see what they think of your new ideas. Later in the process, you create the outline of your document, in the form of a wiki, and authorize everyone in your own organization to draft sections, pose questions and comments, and even edit what others have written. In short, you can collaborate with any number of people at one or several stages of the writing process.

Every document is unique and will therefore call for a unique kind of collaboration. Your challenge is to think creatively about how you can work effectively with others to make your document as good as it can be. Being aware of the strengths and limitations of collaborative tools can prompt you to consider people in your building and around the world who can help you think about your subject and write about it compellingly and persuasively.

**ADVANTAGES AND DISADVANTAGES OF COLLABORATION**

As a student, you might have already worked collaboratively on course projects. As a professional, you will work on many more. In the workplace, the stakes might be higher. Effective collaboration can make you look like a star, but ineffective collaboration can ruin an important project—and hurt your reputation. The best way to start thinking about collaboration is to understand its main advantages and disadvantages.
According to a recent survey conducted by Cisco Systems (2010), more than 75 percent of employees said that collaboration is critical to their success on the job. Some 90 percent said that collaboration makes them more productive. Writers who collaborate can create a better document and improve the way an organization functions:

- **Collaboration draws on a greater knowledge base.** Therefore, a collaborative document can be more comprehensive and more accurate than a single-author document.
- **Collaboration draws on a greater skills base.** No one person can be an expert manager, writer, editor, graphic artist, and production person.
- **Collaboration provides a better idea of how the audience will read the document.** Each collaborator acts as an audience, offering more questions and suggestions than one person could while writing alone.
- **Collaboration improves communication among employees.** Because many of your collaborators share a goal, they learn about each other’s jobs, responsibilities, and frustrations.
- **Collaboration helps acclimate new employees to an organization.** New employees learn how things work—which people to see, which forms to fill out, and so forth—as well as what the organization values, such as the importance of ethical conduct and the willingness to work hard and sacrifice for an important initiative.

**Figure 4.1  Collaboration Beyond the Project Team**

Using social media such as messaging technologies, videoconferencing, shared document workspaces, and wikis, you can tap into the world’s knowledge for ideas and information.

**Advantages of Collaboration**

For more about the writing process, see Ch. 3.
Managing Projects

- Collaboration motivates employees to help an organization grow. New employees bring new skills, knowledge, and attitudes that can help the organization develop. More experienced employees mentor the new employees as they learn from them. Everyone teaches and learns from everyone else, and the organization benefits.

Disadvantages of Collaboration

Collaboration can also have important disadvantages:

- Collaboration takes more time than individual writing. It takes longer because of the time needed for the collaborators to communicate. In addition, meetings—whether they are live or remote—can be difficult to schedule.

- Collaboration can lead to groupthink. When collaborators value getting along more than thinking critically about the project, they are prone to groupthink. Groupthink, which promotes conformity, can result in an inferior document, because no one wants to cause a scene by asking tough questions.

- Collaboration can yield a disjointed document. Sections can contradict or repeat each other or be written in different styles. To prevent these problems, writers need to plan and edit the document carefully.

- Collaboration can lead to inequitable workloads. Despite the project leader’s best efforts, some people will end up doing more work than others.

- Collaboration can reduce a person’s motivation to work hard on the document. A collaborator who feels alienated from the team can lose motivation to make the extra effort.

- Collaboration can lead to interpersonal conflict. People can disagree about the best way to create the document or about the document itself. Such disagreements can hurt working relationships during the project and long after.

MANAGING PROJECTS

At some point in your academic career, you will likely collaborate on a course project that is just too big, too technical, and too difficult for your team to complete successfully without some advance planning and careful oversight. Often, collaborative projects are complex, lasting several weeks or months and involving the efforts of several people at scheduled times so that the project can proceed. For this reason, collaborators need to spend time managing the project to ensure that it not only meets the needs of the audience but also is completed on time and, if appropriate, within budget.
Managing Your Project

These seven suggestions can help you keep your project on track.

► **Break down a large project into several smaller tasks.** Working backward from what you must deliver to your client or manager, partition your project into its component parts, making a list of what steps your team must take to complete the project. This task is not only the foundation of project management but also a good strategy for determining the resources you will need to successfully complete the project on time. After you have a list of tasks to complete, you can begin to plan your project, assign responsibilities, and set deadlines.

► **Plan your project.** Planning allows collaborators to develop an effective approach and reach agreement before investing a lot of time and resources. Planning prevents small problems from becoming big problems with a deadline looming. Effective project managers use planning documents such as needs analyses, information plans, specifications, and project plans.

► **Create and maintain an accurate schedule.** An accurate schedule helps collaborators plan ahead, allocate their time, and meet deadlines. Update your schedule when changes are made, and place the up-to-date schedule in an easily accessible location (for example, on a project Web site) or send the schedule to each team member. If the team misses a deadline, immediately create a new deadline. Team members should always know when tasks must be completed.

► **Put your decisions in writing.** Writing down your decisions, and communicating them to all collaborators, helps the team remember what happened. In addition, if questions arise, the team can refer easily to the document and, if necessary, update it.

► **Monitor the project.** By regularly tracking the progress of the project, the team can learn what it has accomplished, whether the project is on schedule, and if any unexpected challenges exist.

► **Distribute and act on information quickly.** Acting fast to get collaborators the information they need helps ensure that the team makes effective decisions and steady progress toward completing the project.

► **Be flexible regarding schedule and responsibilities.** Adjust your plan and methods when new information becomes available or problems arise. When tasks depend on earlier tasks that are delayed or need reworking, the team should consider revising responsibilities to keep the project moving forward.
CONDUCTING MEETINGS

Collaboration involves meetings. Whether you are meeting live in a room on campus or using videoconferencing tools, the five aspects of meetings discussed in this section can help you use your time productively and produce the best possible document.

Listening Effectively

Participating in a meeting involves listening and speaking. If you listen carefully to other people, you will understand what they are thinking and you will be able to speak knowledgeably and constructively. Unlike hearing, which involves receiving and processing sound waves, listening involves understanding what the speaker is saying and interpreting the information.

Guidelines

Listen Effectively

Follow these five steps to improve your effectiveness as a listener.

► **Pay attention to the speaker.** Look at the speaker, and don’t let your mind wander.

► **Listen for main ideas.** Pay attention to phrases that signal important information, such as “What I’m saying is . . .” or “The point I’m trying to make is . . .”

► **Don’t get emotionally involved with the speaker’s ideas.** Even if you disagree, keep listening. Keep an open mind. Don’t stop listening so that you can plan what you are going to say next.

► **Ask questions to clarify what the speaker said.** After the speaker finishes, ask questions to make sure you understand. For instance, “When you said that each journal recommends different printers, did you mean that each journal recommends several printers or that each journal recommends a different printer?”

► **Provide appropriate feedback.** The most important feedback is to look into the speaker’s eyes. You can nod your approval to signal that you understand what he or she is saying. Appropriate feedback helps assure the speaker that he or she is communicating effectively.

Setting Your Team’s Agenda

It’s important to get your team off to a smooth start. In the first meeting, start to define your team’s agenda.
Setting Your Team’s Agenda

Carrying out these eight tasks will help your team work effectively and efficiently.

► Define the team’s task. Every team member has to agree on the task, the deadline, and the approximate length of the document. You also need to agree on more-conceptual points, including the document’s audience, purpose, and scope.

► Choose a team leader. This person serves as the link between the team and management. (In an academic setting, the team leader represents the team in communicating with the instructor.) The team leader also keeps the team on track, leads the meetings, and coordinates communication among team members.

► Define tasks for each team member. There are three main ways to divide the tasks: according to technical expertise (for example, one team member, an engineer, is responsible for the information about engineering), according to stages of the writing process (one team member contributes to all stages, whereas another participates only during the planning stage), or according to sections of the document (several team members work on the whole document but others work only on, say, the appendices). People will likely assume informal roles, too. One person might be good at clarifying what others have said, another at preventing unnecessary arguments, and another at asking questions that force the team to reevaluate its decisions.

► Establish working procedures. Before starting to work, collaborators need answers—in writing, if possible—to the following questions:
   — When and where will we meet?
   — What procedures will we follow in the meetings?
   — What tools will we use to communicate with other team members, including the leader, and how often will we communicate?

► Establish a procedure for resolving conflict productively. Disagreements about the project can lead to a better product. Give collaborators a chance to express ideas fully and find areas of agreement, and then resolve the conflict with a vote.

► Create a style sheet. A style sheet defines the characteristics of writing style that the document will have. For instance, a style sheet states how many levels of headings the document will have, whether it will have lists, whether it will have an informal tone (using “you” and contractions), and so forth. If all collaborators draft using a similar writing style, the document will need less revision. And be sure to use styles, as discussed in Chapter 3, to ensure a consistent design for headings and other textual features.

► Establish a work schedule. For example, to submit a proposal on February 10, you must complete the outline by January 25, the draft by February 1, and the revision by February 8. These dates are called milestones.

► Create evaluation materials. Team members have a right to know how their work will be evaluated. In college, students often evaluate themselves and other team members. But in the working world, managers are more likely to do the evaluations.
WORK-SCHEDULE FORM

<table>
<thead>
<tr>
<th>Milestones</th>
<th>Responsible Member</th>
<th>Status</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deliver Document</td>
<td>Saada</td>
<td></td>
<td>May 19</td>
</tr>
<tr>
<td>Proofread Document</td>
<td>all</td>
<td></td>
<td>May 18</td>
</tr>
<tr>
<td>Send Document to Print Shop</td>
<td>n/a</td>
<td></td>
<td>n/a</td>
</tr>
<tr>
<td>Complete Revision</td>
<td>Randy</td>
<td></td>
<td>May 17</td>
</tr>
<tr>
<td>Review Draft Elements</td>
<td>all</td>
<td>Done</td>
<td>May 16</td>
</tr>
<tr>
<td>Assemble Draft</td>
<td>Ahmed</td>
<td>Done</td>
<td>May 13</td>
</tr>
<tr>
<td>Establish Tasks</td>
<td>Larry</td>
<td></td>
<td>May 9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Progress Reports</th>
<th>Responsible Member</th>
<th>Status</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progress Report 3</td>
<td>n/a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Progress Report 2</td>
<td>n/a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Progress Report 1</td>
<td>Randy</td>
<td>Done</td>
<td>May 15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Meetings</th>
<th>Agenda</th>
<th>Location</th>
<th>Date</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meeting 3</td>
<td>Review final draft</td>
<td>Room C</td>
<td>May 18</td>
<td>3:30</td>
</tr>
<tr>
<td>Meeting 2</td>
<td>Review draft elements</td>
<td>Room B</td>
<td>May 16</td>
<td>2:00</td>
</tr>
<tr>
<td>Meeting 1</td>
<td>Kickoff meeting</td>
<td>Room C</td>
<td>May 9</td>
<td>3:00</td>
</tr>
</tbody>
</table>

Notes

Notice that milestones sometimes are presented in reverse chronological order; the delivery-date milestone, for instance, comes first. On other forms, items are presented in normal chronological order.

The form includes spaces for listing the person responsible for each milestone and progress report and for stating the progress toward each milestone and progress report.

On TechComm Web
For printable versions of Figs. 4.2, 4.3, and 4.4, click on Forms for Technical Communication on <bedfordstmartins.com/techcomm>.
Figure 4.3
Team-Member Evaluation Form

Mackenzie gives high grades to Kurt and Amber but low grades to Bob. If Kurt and Amber agree with Mackenzie’s assessment of Bob’s participation, the three of them should meet with Bob to discuss why his participation has been weak and to consider ways for him to improve.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Team Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Regularly attends meetings</td>
<td>Kurt</td>
</tr>
<tr>
<td>2. Is prepared at meetings</td>
<td>10</td>
</tr>
<tr>
<td>3. Meets deadlines</td>
<td>9</td>
</tr>
<tr>
<td>4. Contributes good ideas in meetings</td>
<td>9</td>
</tr>
<tr>
<td>5. Contributes ideas diplomatically</td>
<td>8</td>
</tr>
<tr>
<td>6. Submits high-quality work</td>
<td>9</td>
</tr>
<tr>
<td>7. Listens to other members</td>
<td>9</td>
</tr>
<tr>
<td>8. Shows respect for other members</td>
<td>9</td>
</tr>
<tr>
<td>9. Helps to reduce conflict</td>
<td>9</td>
</tr>
<tr>
<td>10. Your overall assessment of this person’s contribution</td>
<td>9</td>
</tr>
<tr>
<td>Total Points</td>
<td>89</td>
</tr>
</tbody>
</table>
SELF-EVALUATION FORM

Your name: Lucas Barnes
Date: April 12, 2011

Title of the project: digital-camera study progress report

Instructions

On this form, record and evaluate your own involvement in this project. In the Log section, record the activities you performed as an individual and those you performed as part of the team. For all activities, record the date and the number of hours you spent. In the Evaluation section, write two brief statements, one about aspects of your contribution you think were successful and one about aspects you want to improve.

<table>
<thead>
<tr>
<th>Log</th>
<th>Individual Activities</th>
<th>Date</th>
<th>Number of Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reviewed proposal and analyzed the Simmons article</td>
<td>April 9</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td>Wrote a draft of the progress report</td>
<td>April 10</td>
<td>2.5</td>
</tr>
<tr>
<td></td>
<td>Revised a draft of the progress report</td>
<td>April 11</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Activities as Part of Team</th>
<th>Date</th>
<th>Number of Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Met to discuss test research</td>
<td>April 10</td>
<td>1</td>
</tr>
<tr>
<td>E-mailed group and replied to questions about draft</td>
<td>April 11</td>
<td>2.5</td>
</tr>
<tr>
<td>Met to discuss revision of progress report</td>
<td>April 11</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Evaluation

Aspects of My Participation That Were Successful

I think I did a good job in reviewing the proposal and critiquing the research. I had the draft ready on time, although there were some rough parts in it. I participated effectively in the group meeting about the revision. I think I’m getting a little better about being less sensitive when the team suggests revisions.

Aspects of My Participation That I Want to Improve in the Future

I still need to get better at completing my work early enough so I can set it aside before getting it out to the other group members. I get embarrassed when they point out superficial mistakes that I should have caught. I need to practice using styles so that my drafts are easier to incorporate into the group’s draft. The other members remembered to use them. I didn’t.

The evaluation section of the form is difficult to fill out, but it can be the most valuable section for you in assessing your skills in collaborating. When you get to the second question, be thoughtful and constructive. Don’t merely say that you want to improve your skills in using the software. And don’t just write “None.”
Pulling Your Weight on Collaborative Projects

Collaboration involves an ethical dimension. If you work hard and well, you help the other members of the team. If you don’t, you hurt them.

You can’t be held responsible for knowing and doing everything, and sometimes unexpected problems arise in other courses or in your private life that prevent you from participating as actively and effectively as you otherwise could. When problems occur, inform the other team members as soon as possible. For instance, call the team leader as soon as you realize you will have to miss a meeting. Be honest about what happened. Suggest ways you might make up for missing a task. If you communicate clearly, the other team members are likely to cooperate with you.

If you are a member of a team that includes someone who is not participating fully, keep records of your attempts to get in touch with that person. When you do make contact, you owe it to that person to try to find out what the problem is and suggest ways to resolve it. Your goal is to treat that person fairly and to help him or her do better work, so that the team will function more smoothly and more effectively.

Conducting Efficient Meetings

Human communication is largely nonverbal. That is, although people communicate through words and through the tone, rate, and volume of their speech, they also communicate through body language. For this reason, meetings provide the most information about what a person is thinking and feeling—and the best opportunity for team members to understand one another.

To help make meetings effective and efficient, team members should arrive on time and stick to the agenda. One team member should serve as secretary by recording the important decisions made at the meeting. At the end of the meeting, the team leader should summarize the team’s accomplishments and state the tasks each team member is to perform before the next meeting. If possible, the secretary should give each team member this informal set of meeting minutes.

Communicating Diplomatically

Because collaborating can be stressful, it can lead to interpersonal conflict. People can become frustrated and angry with one another because of personality clashes or because of disputes about the project. If the project is to succeed, however, team members have to work together productively. When you speak in a team meeting, you want to appear helpful, not critical or overbearing.

Critiquing a Team Member’s Work

In collaborating, team members often critique notes and drafts written by other team members. Knowing how to do it without offending the writer is a valuable skill.
Guidelines

Communicating Diplomatically

These seven suggestions for communicating diplomatically help you communicate effectively.

► **Listen carefully, without interrupting.** See the Guidelines box on page 61.

► **Give everyone a chance to speak.** Don’t dominate the discussion.

► **Avoid personal remarks and insults.** Be tolerant and respectful of other people’s views and working methods. Doing so is right—and smart: if you anger people, they will go out of their way to oppose you.

► **Don’t overstate your position.** A modest qualifier such as “I think” or “it seems to me” is an effective signal to your listeners that you realize that everyone may not share your views.

<table>
<thead>
<tr>
<th>OVERBEARING</th>
<th>My plan is a sure thing; there’s no way we’re not going to kill Allied next quarter.</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIPLOMATIC</td>
<td>I think this plan has a good chance of success: we’re playing off our strengths and Allied’s weaknesses.</td>
</tr>
</tbody>
</table>

Note that in the diplomatic version, the speaker calls it “this plan,” not “my plan.”

► **Don’t get emotionally attached to your own ideas.** When people oppose you, try to understand why. Digging in is usually unwise—unless it’s a matter of principle—because, although you may be right and everyone else wrong, it’s not likely.

► **Ask pertinent questions.** Bright people ask questions to understand what they hear and to connect it to other ideas. Asking questions also encourages other team members to examine what they hear.

► **Pay attention to nonverbal communication.** Bob might say that he understands a point, but his facial expression might show that he doesn’t. If a team member looks confused, ask him or her about it. A direct question is likely to elicit a statement that will help the team clarify its discussion.

Guidelines

Critiquing a Colleague’s Work

Most people are very sensitive about their writing. Following these three suggestions for critiquing writing increases the chances that your colleague considers your ideas positively.

► **Start with a positive comment.** Even if the work is weak, say, “You’ve obviously put a lot of work into this, Joanne. Thanks.” Or, “This is a really good start. Thanks, Joanne.”

► **Discuss the larger issues first.** Begin with the big issues, such as organization, development, logic, design, and graphics. Then work on smaller issues, such as paragraph development, sentence-level matters, and word choice. Leave editing and proofreading until the end of the process.
The tremendous growth of social media such as Facebook, YouTube, and Twitter in the general population is reflected in the working world. Although few of the social media sites were created to be used in the working world, most of them are used by professionals as business tools. Today, entrepreneurs are creating business-specific versions of some of the popular social media, such as Twitter-like microblogs that can be integrated with the rest of the organization’s digital infrastructure and protected behind the organization’s firewall to reduce security threats.

With each passing year, people are discovering new ways to use social media productively in the working world. Swensrud’s table, “Imagine Facebook and Twitter-Style Collaboration in the Workplace” (2010), provides some examples of this relationship:

<table>
<thead>
<tr>
<th>Social media in your personal life</th>
<th>Social tools in your work life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post photos from the barbecue last Saturday, and they will show up in the feeds of your friends and family.</td>
<td>Post the new sales presentation you’ve updated, and it will show up in the feeds of your colleagues.</td>
</tr>
<tr>
<td>Collaborate with friends to plan a camping trip for next month.</td>
<td>Collaborate with colleagues to prepare for the big customer meeting next week.</td>
</tr>
</tbody>
</table>
Managers in business, industry, and government around the world encourage employees to use social media to find information, create and sustain relationships with stakeholders (such as other organizations, customers, suppliers, and the general public), recruit and retain workers, and keep employees informed about the organization’s new products, services, and initiatives.

Because social media make it convenient for people to participate in the work of their organizations, they are having a profound effect on the ways that information is created and distributed in the working world. In a traditional organization that relies primarily on face-to-face meetings, only those who are invited to the meeting get to participate fully—and the organization benefits from the knowledge and ideas of only those people. However, an organization that relies on social media can tap into the knowledge and ideas of everyone in the organization—and many others outside the organization.

Different types of electronic tools facilitate the kind of broad, two-way interchange of information and ideas that is fundamental to effective collaboration. The following discussion highlights the major technologies that enable collaboration, including word processing tools, messaging technologies, videoconferencing, shared document workspaces, and virtual worlds.

### Word Processing Tools

Word processors offer three powerful features you will find useful in collaborative work:

- The **comment feature** lets readers add electronic comments to a file.
- The **revision feature** lets readers mark up a text by deleting, revising, and adding words and indicates who made which suggested changes.
- The **highlighting feature** lets readers use one of about a dozen “highlighting pens” to call the writer’s attention to a particular passage.
How to Use the Review Tab

When collaborating with others, you can distribute your document to readers electronically so that they can add comments, revise text, and highlight text. You can then review their comments, keep track of who made which changes, compare two versions, and decide whether to accept or decline changes without ever having to print your document. You can use the Review tab to electronically review a document or to revise a document that has already been commented on by readers.

1. Select the Review tab to access the Comments, Tracking, Changes, and Compare groups.

2. To electronically review a document, highlight the relevant text and do the following:

   - Select the New Comment button in the Comments group to write comments in a bubble in the margin.
   - Select the Track Changes button to distinguish between revised text and original text.
   - On the Home tab in the Font group, select the Text Highlight button to emphasize a particular passage.
   - To change the color or design of comment bubbles or markup, select the Track Changes button in the Tracking group, and select Change Tracking Options. The Track Changes Options dialog box will appear.

3. To revise a document that has already been commented on by reviewers, you can do the following:

   - Use the Tracking group to change how the document is displayed.
   - Select buttons in the Changes group to see the previous or next comment and to accept or reject a change.
   - Select the Reviewing Pane button to review all comments and changes.

**KEYWORDS:** review tab, comments group, tracking group, changes group, compare group
The first task of the on-site evaluations was to set up and configure each server. We noted the relative complexity of setting up each system to our network.

After we had the system configured, we performed a set of routine maintenance tasks: add a new memory module, swap a hard drive, swap a power supply, and perform system diagnostics.

We recorded the time and relative difficulty of each task. Also, we tried to gather a qualitative feeling for how much effort would be involved in the day-to-day maintenance of the systems.

After each system was set up, we completed the maintenance evaluations and began the benchmark testing. We ran the complete WinBench and NetBench test suites on each system. We chose several of the key factors from these tests for comparison.

Comment: Huh? What exactly does this mean?
Comment: Okay, good. Maybe we should explain why we chose these tests.
Comment: What kind of scale are you using? If we don’t explain it, it’s basically useless.
Comment: Same question as above.
Comment: Will readers know these are the right tests? Should we explain?

**Messaging Technologies**

Two messaging technologies have been around for decades: instant messaging and e-mail. *Instant messaging* (IM) is real-time, text-based communication between two or more people. In the working world, people use IM as a way to enable several people to communicate textual information at the same time from different locations. *E-mail* is an asynchronous medium for sending brief textual messages and for transferring files such as documents, spreadsheets, images, and videos.

In the last decade, several new technologies have been introduced that are made to function on mobile devices such as phones. Of these, the two most popular are text messaging and microblogging.

*Text messaging* is a technology for sending messages that can include text, audio, images, and video. Texting is the fastest-growing technology for exchanging messages electronically because most people keep their phones nearby. Organizations use text messaging for such tasks as sending a quick update or alerting people that an item has been delivered or a task
completed. On your campus, the administration might use a texting system to alert people about a campus emergency.

**Microblogging** is a technology for sending very brief textual messages to your personal network. You’re familiar with the world’s most popular microblog, Twitter, which now has more than half a billion users. Although some organizations use Twitter, many use Twitter-like microblogs such as Yammer, which includes a search function and other features. Figure 4.5 shows a screen from Socialtext, another microblog.

**Videoconferencing**

Videoconferencing technology allows two or more people at different locations to simultaneously see and hear one another as well as exchange documents, share data on computer displays, and use electronic whiteboards. Systems such as Skype are simple and inexpensive, requiring only a Webcam and some free software. However, there are also large, dedicated systems that require extensive electronics, including cameras, servers, and a fiber-optic network or high-speed telephone lines. Figure 4.6 shows a videoconferencing system.
Videoconferencing systems range from sophisticated ones like this to inexpensive cameras attached to individual workstations to systems that work on smartphones. Most videoconferencing systems can display more than one window to accommodate several sets of participants. 


**Guidelines**

**Participating in a Videoconference**

Follow these six suggestions for participating effectively in a videoconference.

- **Practice using the technology.** For many people, being on camera is uncomfortable, especially the first time. Before participating in a high-stakes videoconference, become accustomed to the camera by participating in a few informal videoconferences.

- **Arrange for tech support at each site.** Participants can quickly become impatient or lose interest when someone is fumbling to make the technology work. Each site should have a person who can set up the equipment and troubleshoot if problems arise.

- **Organize the room to encourage participation.** If there is more than one person at the site, arrange the chairs so that they face the monitor and camera. Each person should be near a microphone. Before beginning the conference, check that each location has adequate audio and video as well as access to other relevant technology such as computer monitors. Finally, remember to introduce everyone in the room, even those off camera, to everyone participating in the conference.
Wikis and Shared Document Workspaces

Twenty years ago, people would collaborate on a document by using e-mail to send it from one person to another. One person would write or assemble the document, then send it to another person, who would revise it and send it along to the next person, and so forth. Although the process was effective, it was inefficient: only one person could work on the document at any given moment. Today, two new technologies—wikis and shared document workspaces—make it much simpler and more convenient to collaborate on a document.

A wiki is a Web-based document that authorized users can write and edit. The best-known example of a wiki is Wikipedia, an online encyclopedia that contains millions of articles written and edited by people around the world. In the working world, wikis are used for creating many kinds of documents, such as instructions, manuals, and policy documents. For instance, many organizations create their policies on using social media by setting up wikis and inviting employees to write and edit what others have written. The concept is that a wiki draws upon the expertise and insights of people throughout the organization and, sometimes, outside the organization. Figure 4.7 shows a portion of a wiki.

A shared document workspace is a technology that makes it convenient for a team of users to edit a file, such as a PowerPoint slide set or a Word document. A shared document workspace such as Microsoft SharePoint or Google Docs archives all the revisions made by each of the team members, so that the team can create a single document that incorporates selected revisions. Some shared document workspaces enable a user to download the document, revise it on his or her own computer, and then upload it again. This feature makes it extremely convenient because the user does not need to be connected to the Internet to work on the document.

Make eye contact with the camera. Eye contact is an important element of establishing your professional persona. The physical setup of some videoconferencing systems means you will likely spend most of your time looking at your monitor and not directly into the camera. However, this might give your viewers the impression that you are avoiding eye contact. Make a conscious effort periodically to look directly into the camera when speaking.

Dress as you would for a face-to-face meeting. Wearing inappropriate clothing can distract participants and damage your credibility.

Minimize distracting noises and movements. Sensitive microphones can magnify the sound of shuffling papers, fingers tapping on tables, and whispering. Likewise, depending on your position in the picture frame, excessive movements can be distracting.
Virtual Worlds

Organizations are using virtual worlds, such as Second Life, to conduct meetings and conferences. Participants create avatars and visit different locations in the virtual world to view displays, watch product demonstrations, and talk with others. Many people think that entering a three-dimensional virtual world, in which you can talk with others through a headset connected to a computer, creates a more-realistic experience than merely visiting a Web site, watching a video, or talking on the phone. At IBM, where over 20,000 people use Second Life at work, employees attend virtual planning sessions, then vote for their favorite ideas (Gronstedt, 2009). Figure 4.8 shows how one company uses a virtual world to display a product.

Although this section has discussed various collaboration tools as separate technologies, the trend today is to bundle them in commercial products, such as Lotus Sametime, a suite of voice, data, and video services. These services usually share four characteristics:

- They are cloud based. That is, organizations lease the services and access them over the Internet. They do not have to acquire and maintain special hardware. This model is sometimes called software as a service.
• They are integrated across desktop and mobile devices. Employees can access these services from their desktops or mobile devices, thus freeing them to collaborate in real time even if they are not at their desks. Some service providers provide presence awareness, the ability to determine a person’s online status, availability, and geographic location.

• They are customizable. Organizations can choose whichever services they wish, and then customize them to work effectively with the rest of the organization’s electronic infrastructure, such as computer software and telephone systems.

• They are secure. Organizations store the software behind a firewall, providing security: only authorized employees have access to the services.

ETHICS NOTE

Maintaining a Professional Presence Online

According to a reputable report from Cisco Systems (2010), half of the surveyed employees claim to routinely ignore company guidelines that prohibit the use of social media for non-work-related uses during company time. When you use your organization’s social media at work, be sure to act professionally so that your actions reflect positively on you and your organization. Be aware of several important legal and ethical issues related to social media.

Although the law has not always kept pace with recent technological innovations, a few things are clear. You and your organization can be held liable if you make defamatory
In addition, follow these guidelines to avoid important ethical pitfalls:

- Don’t waste company time using social media for nonbusiness purposes. You owe your employer a duty of diligence (hard work).
- Don’t divulge secure information, such as a login and password that exposes your organization to unauthorized access, and don’t reveal information about products that have not yet been released.
- Don’t divulge private information about anyone. Private information relates to such issues as religion, politics, and sexual orientation.
- Don’t make racist or sexist comments or post pictures of people drinking.

If your organization has a written policy on the use of social media, study it carefully. Ask questions if anything in it is unclear. If the policy is incomplete, work to make it complete. If there is no policy, work to create one.

For an excellent discussion of legal and ethical aspects of using your organization’s social media, see Kaupins and Park (2010).

GENDER AND COLLABORATION

Effective collaboration involves two related challenges: maintaining the team as a productive, friendly working unit and accomplishing the task. Scholars of gender and collaboration see these two challenges as representing the feminine and the masculine perspectives.

This discussion should begin with a qualifier: in discussing gender, we are generalizing. The differences in behavior between two men or between two women are likely to be greater than the difference between men and women in general.

The differences in how the sexes communicate and work in teams have been traced to every culture’s traditional family structure. As the primary caregivers, women have learned to value nurturing, connection, growth, and cooperation; as the primary breadwinners, men have learned to value separateness, competition, debate, and even conflict (Karten, 2002). In collaborative teams, women appear to value consensus and relationships more, to show more empathy, and to demonstrate superior listening skills compared to men. Women talk more about topics unrelated to the task (Duin, Jorn, & DeBower, 1991), but this talk is central to maintaining team coherence. Men appear to be more competitive than women and more likely to assume leadership roles. Scholars of gender recommend that all professionals strive to achieve an androgynous mix of the skills and aptitudes commonly associated with both women and men.
CULTURE AND COLLABORATION

Most collaborative teams in industry and in the classroom include people from other cultures. The challenge for all team members is to understand the ways in which cultural differences can affect team behavior. People from other cultures

- might find it difficult to assert themselves in collaborative teams
- might be unwilling to respond with a definite “no”
- might be reluctant to admit when they are confused or to ask for clarification
- might avoid criticizing others
- might avoid initiating new tasks or performing creatively

Even the most benign gesture of friendship on the part of a U.S. student can cause confusion. If a U.S. student casually asks a Japanese student about her major and the courses she is taking, she might find the question too personal but consider it perfectly appropriate to talk about her family and her religious beliefs (Lustig & Koester, 2009). Therefore, you should remain open to encounters with people from other cultures without jumping to conclusions about what their actions might or might not mean.

In This Book
For more about multicultural issues, see Ch. 5, p. 94.

Writer’s Checklist

In managing your project, did you

- break down a large project into several smaller tasks? (p. 60)
- plan your project? (p. 60)
- create and maintain an accurate schedule? (p. 60)
- put your decisions in writing? (p. 60)
- monitor the project? (p. 60)
- distribute and act on information quickly? (p. 60)
- act flexibly regarding schedule and responsibilities? (p. 60)

In your first team meeting, did you

- define the team’s task? (p. 62)
- choose a team leader? (p. 62)
- define tasks for each team member? (p. 62)
- establish working procedures? (p. 62)
- establish a procedure for resolving conflict productively? (p. 62)
- create a style sheet? (p. 62)
- establish a work schedule? (p. 62)
- create evaluation materials? (p. 62)

To conduct efficient meetings, do you

- arrive on time? (p. 66)
- stick to the agenda? (p. 66)
- make sure that a team member records important decisions made at the meeting? (p. 66)
- make sure that the leader summarizes the team’s accomplishments and that every member understands what his or her tasks are? (p. 66)

To communicate diplomatically, do you

- listen carefully, without interrupting? (p. 67)
- give everyone a chance to speak? (p. 67)
- avoid personal remarks and insults? (p. 67)
- avoid overstating your position? (p. 67)
- avoid getting emotionally attached to your own ideas? (p. 67)
- ask pertinent questions? (p. 67)
- pay attention to nonverbal communication? (p. 67)
In critiquing a team member’s work, do you
☐ start with a positive comment? (p. 68)
☐ discuss the larger issues first? (p. 68)
☐ talk about the document, not the writer? (p. 68)
☐ If appropriate, do you use the comment, revision, and highlighting features of your word processor? (p. 69)

In participating in a videoconference, did you
☐ practice using videoconferencing technology? (p. 73)
☐ arrange for tech support at each site? (p. 73)
☐ organize the room to encourage participation? (p. 73)
☐ make eye contact with the camera? (p. 74)
☐ dress as you would for a face-to-face meeting? (p. 74)
☐ minimize distracting noises and movements? (p. 74)

Exercises

In This Book For more about memos, see Ch. 14, p. 385.

1. Experiment with the comment, revision, and highlighting features of your word processor. Using online help if necessary, learn how to make, revise, and delete comments; make, undo, and accept revisions; and add and delete highlights.

2. INTERNET EXERCISE Using a search engine, find free videoconferencing software on the Internet. Download the software, and install it on your computer at home. Learn how to use the feature that lets you send attached files.

3. INTERNET EXERCISE Using a wiki site such as wikiHow .com, find a set of instructions on a technical process that interests you. Study one of the revisions to the instructions, noting the types of changes made. Do the changes relate to the content of the instructions, to the use of graphics, or to the correctness of the writing? Be prepared to share your findings with the class.

4. If you are now enrolled in a technical-communication course that calls for you to do a large collaborative project, such as a recommendation report or an oral presentation, meet with your team members. Study the assignment for the project, and then fill out the work-schedule form. (You can download the form from <bedfordstmartins.com/techcomm>.) Be prepared to share your form with the class.

5. You have probably had a lot of experience working in collaborative teams in previous courses or on the job. Brainstorm for five minutes, listing some of your best and worst experiences participating in collaborative teams. Choose one positive experience and one negative experience. Think about why the positive experience went well. Was there a technique that a team member used that accounted for the positive experience? Think about why the negative experience went wrong. Was there a technique or action that accounted for the negative experience? How might the negative experience have been prevented—or fixed? Be prepared to share your responses with the class.

6. INTERNET EXERCISE Your college or university wishes to update its Web site to include a section called “For Prospective International Students.” Along with members of your team, first determine whether your school already has information of particular interest to prospective international students. If it does, write a memo to your instructor describing and evaluating the information. Is it accurate? Comprehensive? Clear? Useful? What kind of information should be added to the site to make it more effective?

   If the school’s site does not have this information, perform the following two tasks:
   • Plan. What kind of information should this new section include? Does some of this information already exist elsewhere on the Web, or does it all have to be created from scratch? For example, can you create a link to an external site with information on how to obtain a student visa? Write an outline of the main topics that should be covered.
   • Draft. Write the following sections: “Where to Live on or Near Campus,” “Social Activities on or Near Campus,” and “If English Is Not Your Native Language.” What graphics could you include? Are they already available? What other sites should you link to for these three sections?

   In a memo, present your suggestions to your instructor.
Case 4: Accommodating a Team Member’s Scheduling Problems

**Background**
In your technical-communication course, you have been assigned to a team with two other students: DeAnna Omanovic and Jason Stokes. Your instructor, Dr. Robert Jenkins, likes to create teams of students from different majors. You have never met DeAnna or Jason.

Forty percent of your final course grade will be determined by your grade on three collaborative assignments: a research proposal, a recommendation report, and an oral presentation. The instructor believes that collaboration is an essential skill for college students and professionals alike, and he emphasizes the importance of learning to work effectively with others. In his syllabus, Dr. Jenkins describes his approach to grading collaborative assignments: each member of the team is to submit a self-evaluation form and a team-member evaluation form for each assignment. On the team-member evaluation form, each member assigns grades to every other member of the team for ten criteria, including such factors as attendance at team meetings, quality of the work contributed to the team, and quality of communication with other team members.

It is two weeks before the first collaborative assignment: the research proposal. You e-mail DeAnna and Jason and propose a meeting Thursday at four o’clock in the library to discuss procedures and possible subjects for your research proposal and the subsequent collaborative assignments. Both DeAnna and Jason agree to attend, but Jason does not show up. DeAnna tells you she received no communication from Jason that he would be late or unable to attend. At 4:30, you and DeAnna agree that you will try to get in touch with Jason to see if the three of you can reschedule the meeting.

You e-mail Jason, asking if there was some confusion about the time or place of the meeting but receive no reply. After dinner, you receive an e-mail from DeAnna (Document 4.1).

You respond to DeAnna (Document 4.2), presenting a plan to give Jason a little time to work through whatever his problem is, while enabling you and DeAnna to do some productive work. She agrees with your idea.

Two days pass. You and DeAnna have not seen Jason in class, and he has not contacted either of you. Later that day you decide to phone Jason to see if you can get a better idea of what is going on. Jason’s wife, Andrea, answers the phone. She sounds distraught. Jason is at the hospital, where they took their son three days ago with a fever of 104 degrees. The doctors have managed to bring the fever down to 102 degrees, but they still don’t have a diagnosis. Andrea says Jason is very upset. He has missed a big assignment in his economics course and a midterm in his civil-engineering course. Andrea herself has not been to her job in three days; she and Jason have been at the hospital almost around the clock since their son was admitted. As Andrea is apologizing to you for Jason’s missing the meeting, she starts to break down.

Your cell rings. It’s DeAnna, who tells you she went to Dr. Jenkins’s office after class today to complain about Jason because he didn’t even have the courtesy to respond to e-mails after missing the meeting. She told Dr. Jenkins that she has had to work with jerks like Jason at the office and she’s not going to get a lousy grade in this course because Jason has decided to blow it off.

**Your Assignment**

1. Draft an e-mail to send to DeAnna and Jason proposing a policy for communicating with other team members when problems arise.

2. Draft an e-mail for you and DeAnna to send to Jason and Dr. Jenkins proposing an approach to dealing with the fact that Jason is not able to participate in the collaborative assignments—at least not for a while. This approach should address the fact that although Jason did not communicate effectively with you and DeAnna, the situation with his sick son is causing him and his wife great distress. The proposal is due in one week, the recommendation report in four weeks, and the oral presentation in five weeks.
Hi.

Below is an e-mail I just got from Jason:

Hey DeAnna-

Something came up and I had to miss the team meeting. I’ll get back to you as soon as I know what’s going on.

(I’m writing to you cause I forgot the other woman’s name; tell her I’m sorry)

Uncool.

DeAnna

Hi, DeAnna-

I agree: uncool. But let’s give Jason a couple of days to get back to us.

In the meantime, why don’t you and I each try to think of three topics that we’d be comfortable working on for the three collaborative assignments? According to Dr. Jenkins’ comments (see the syllabus, p. 3), the subject should be kind of technical (GPS systems, computer gear, etc.) and something that all team members are willing to work on. It would help if the subject were some sort of consumer product so that there is enough technical information about it on the Web.

We can exchange ideas in two days and, if you want, get together. Then, when we find out what’s going on with Jason, we’ll have something to present to him and we won’t have lost too much time.

Sound like a plan?

(Your name)