**Technology in Action, Eleventh Edition
Answer Key Chapter 2**

**making the transition to…next semester**

1. **Watching Device Demos**

YouTube is a great resource for product demonstrations. Open your browser, navigate to YouTube (youtube.com), and search on any type of computer peripheral discussed in this chapter to see if you can find a demonstration of a cool product. How helpful are these demonstrations? Make a video demonstration of a computing device you have and post it to your course management system or present it to your classmates (as specified by your instructor).

*The videos on YouTube have made it a go-to site for students looking to learn more. If you ask students to evaluate a demonstration they watch on YouTube, they might respond by describing how helpful the video was, whether more than one brand was demonstrated, how old the video was, whether troubleshooting tips were included, and whether anything was left out that the students believed was important.*

*If you ask students to create a demonstration video, a word of caution is in order. If there is a desire to maintain privacy, allow students to create a video but don’t penalize them for not uploading it to YouTube. For the content, think about what you would want to share with another future user about a device that you use regularly. What do you use it for and how has it benefited you? What do you wish was in the manual but wasn’t there? Also, make sure that there is some uniformity and quality to creating the video, perhaps with everyone using the same type of recording device such as a digital recorder or a digital camera with video capability, and a tripod.*

1. **Communicating with the Computer**

You’re involved in many group projects at school. Between your work, your classes, and other outside responsibilities, you’re finding it difficult to meet in person. Investigate the devices you would need to be able to have virtual group meetings.

*To get students started, have them research the options for a new user of VoIP. In their analysis, consider these questions: What devices are needed? Do they need to purchase new equipment or do they have the capacity in their computer already? Does it require a lot of training to use or is it simple? Can free software be used? Will there be any monthly expense? How will this choice compare to other communication options?*

*Students can also perform an Internet search for “free video conferencing” and find several sites where their meetings can be hosted at no cost. Facebook offers networking options and Skype is another alternative. In addition, wiki sites and software such as Google Docs give multiple users the capability to provide input on a single document. Devices needed include a camera and microphone.*

1. **Ultrabook or Tablet**

You need a new computing device for school. Consider the following:

a. Explain the differences between a tablet and an ultrabook.

b. What advantages would an ultrabook provide you for your academic career?

c. What advantages would a tablet (such as an iPad) provide to you in the classroom? At home?

d. Which device do you think is better suited to your needs? Explain fully.

*This is a great project for students, as they are often considering the purchase of new computing devices. Start the students off by getting them to focus on identifying their particular needs, since this is what should drive the choice of device. Perhaps in class, have students make a list of their needs and then complete the product research as homework. Typical factors students consider are: product weight, battery life, connectivity options, compatibility with existing systems/devices, screen size, storage capacity (although less so with cloud storage solutions becoming popular). Students often cite the need to record lectures with these devices.*

**making the transition to…the workplace**

1. **Backing Up Your Work**

You’ve embarked on a position as a freelance editor. You’ll be using your own computer. Until now, you haven’t worried too much about backing up your data. Now, however, it’s extremely important that you back up all your work frequently. Research the various backup options available, including online backup services, external hard drives, and portable flash storage. What are the size limitations of each? What are the initial and ongoing costs of each? How frequently do the options allow you to perform backups? Which option would you would choose, and why?

*Losing data creates a horrible situation. Yet many users take for granted that technology will always do what we need it to do when we need it to work. What types of precautions would students take to ensure their personal files are protected and what would they do to keep their work files protected? Students’ answers may vary, but should include a discussion about the various storage options available, including portable options such as flash storage, external storage devices, and online or cloud-based services. Students should discuss the pros and cons of each method, including cost and storage space limitations. Is this something students can do without an expert or will additional tech support fees be incurred? What are the best case scenarios for retrieving lost data and how often should data be backed up?*

1. **What Hardware Will You Use?**

When you arrive at a new position for a company, your employer will most likely provide you with a computer. Based on the career you’re in now or are planning to pursue, answer the following questions:

a. What kind of computer system would the company mostly likely provide to you—desktop, laptop, tablet PC, or something else? How does that compare with the type of system with which you prefer to work?

b. If you were required to use a type of computer you’d never used before (such as a Mac instead of a PC), how would you go about learning to use the new computer?

c. What other devices might your employer provide? Consider such items as smartphones or peripherals such as printers. How important is it for these devices to conform to the latest trends?

d. Should you be able to use employer-provided equipment, such as a smartphone, for personal benefit? Does your answer differ if you have to pay for part or all of the device?

*Responses will vary, depending on career choice and individual preferences. What do individuals in this career typically use? For example, a graphic designer might own a laptop but use a large monitor or multiple monitors with a desktop computer. If you are moving into sales, you might use a tablet or an ultrabook. What is your preference?*

*It can be is difficult to begin using a program or operating system that is different from what you are accustomed to using. Yet, it is easier to learn to use a computer now than it used to be, and likewise it should be even easier in the future. Think about sources for tutorials for the various operating systems. Are there videos on YouTube or from the manufacturer that you can use to learn? How do you best learn: watching and then doing, reading and then doing, or trying first instead?*

*Employees should not take advantage of the employer. What guidelines would be reasonable for personal use of equipment provided by the employer?*

**Team Time**

**Which Mobile Device Is the Best?**

 Students should be assessed on the following:

* 1. Research conducted on various system components
	2. Recommendations match the technology needs and goals of company and staff
	3. Discussion of the benefits and advantages of all systems under consideration with adequate support provided for final recommendation

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|  | Needs improvement  | Done Adequately | Done Well |
| Research on laptop computers provides sufficient information for an informed recommendation |  |  |  |
| Research on smartphones with large screens (phablets) provides sufficient information for an informed recommendation |  |  |  |
| Research on tablet computers (iPads) provides sufficient information for an informed recommendation |  |  |  |
| Students have identified the technology needs and goals of company and staff |  |  |  |
| Students have outlined the benefits and disadvantages of various systems, identified a solution or combination of solutions, and provided support for the recommendation  |  |  |  |

**Ethics Project**

**Green Computing**

* 1. Students need to create and summarize a situation which involves green computing. The event/scenario should involve more than one character so that role-playing can take place.
	2. Students need to create an outline to use during a role-playing event.
	3. Students role-play the event using chat or other collaborative tools.
	4. Students should present their case/experience to the class via PowerPoint or other method as determined by instructor.

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