

Bid Specifications

An introduction to **Computers**
and **Information Technology**

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Lab Description

ITCenter21™ integrates curriculum and software applications in a school's networked computer laboratory to provide a complete IT foundation. Students use interactive multimedia presentations to cover basic concepts, then solve problems and develop skills using real-world IT applications.

Students' activities in the ITCenter21™ lab are automatically tracked, assessed and reported via a powerful classroom management system, freeing the IT instructor to focus on teaching! And outside the ITCenter21™ lab, optional "Academic Enhancement Units" are available to academic instructors to introduce the use of computers and information technology in the math, science, language arts and social studies classrooms as well.

Based on the standards developed by the International Society for Technology in Education (ISTE), as well as numerous state standards for the study of information technology, the ITCenter21™ curriculum covers a wide range of topics, including:

- Computer Research
- Telecommunications and Ethics
- Evaluation and Management of Information
- Word Processing
- Spreadsheets
- Databases
- Desktop Publishing
- Computer Graphics
- Multimedia Presentations
- Web Publishing

At the heart of the ITCenter21™ system is webTRAC, a server-based classroom management system designed to simplify Tracking, Reporting, Assessment and Control in the lab.

In addition to Gradebook, Attendance and Scheduling functions, webTRAC offers other "real-time" management features, such as the ability to monitor current student progress, and to communicate with students via instant messaging and e-mail. webTRAC also allows the instructor to easily edit and customize the ITCenter21™ curriculum and instructions, add teacher notes, and even create new lessons using existing templates!

The following pages list the unit descriptions for the ITCenter21™ program, providing in-depth information on the course activities.

Introduction

Lesson One

The teacher will present the basic information explaining how to log on to the course.

First, the teacher will use the supplied Computer Guidelines to explain the rules for handling computer equipment. Specifically, the teacher will detail the behavior expected of students in the computer lab.

Then, the teacher will help students log-on to their computer workstations. The teacher will distribute the supplied Log On form to students. Then the teacher will guide the students through the initial log-on process.

Working individually at each workstation, students will use interactive multimedia presentations that present an overview of the unit content, including such topics as what information technology is and why students should learn about information technology.

Students will learn how to navigate curriculum in *ITcenter21*. Students will become familiar with the simple menu bars, multimedia presentations, and on-screen instructions. They discover how to use the Grade Average and Lesson Progress buttons. They learn how to review content. In addition, they use hyperlinked glossary words.

Students will learn how to answer questions in the course. They will practice answering different types of questions, including multiple choice, true-false, fill-in-the-blank, and short answer questions. Then students will learn about essential questions. They will answer essential questions about information technology. They will answer these questions again at the end of the unit.

Students will use interactive multimedia presentations that present the students' roles in this course. They discover the teacher's role as a guide for the course. In addition, students learn about the process for asking for help in this course.

Lesson Two

Students will use step-by-step instructions on the Log On form to practice logging-on to the workstation, and then begin lesson two.

Students will use interactive multimedia presentations to review basic information technology concepts. Then students learn about application software and software suites.

Students follow interactive on-screen instructions to open word processing software. They will learn about different parts in an application. Specifically, they will learn about the document area, title bar, menu bar, menus, and toolbars. Students will also practice using tools in the *ITcenter21* curriculum, including popup tips and views.

Students follow interactive on-screen instructions to open a computer lab contract. They also save and print the sample contract for use of the

computer lab. At the teacher's option, these contracts can be edited to align with the school's Acceptable Use Policy.

Finally, students are given a homework assignment to have their parent or guardian sign their computer lab contract. They will turn in their signed computer lab contract in Lesson.

Lesson Three

Students will use step-by-step instructions on the Log On form to practice logging-on to the workstation, and then begin lesson three.

Throughout the class, the teacher will photograph each student with a digital camera. Then the teacher will follow detailed instructions to download the photograph files to a safe area in the ITcenter21 management system. Students will use their personal photographs later in the unit. In addition, students can use their personal photographs in some ITcenter21 projects.

Students will use interactive multimedia presentations to review basic information technology concepts. Students will learn more about navigating the curriculum. Specifically, students will learn how to use the Teacher Tips, Take Notes, and Print Page buttons on the menu bar. Students will then practice navigating links to separate sets of pages.

Students will use interactive multimedia presentations to view brief presentations for each of the major units in the course. Students will describe what unit they think will be their favorite unit in the course.

Finally, students are reminded about their homework assignment to have their parent or guardian sign their computer lab contract. They will turn in their signed computer lab contract in Lesson 5.

Lesson Four

Students will use step-by-step instructions on the Log On form to practice logging-on to the workstation, and then begin lesson four.

Students will use interactive multimedia presentations to review basic information technology concepts. Students will use an interactive multimedia presentation to learn about files and file management.

Then students follow interactive on-screen instructions to open file management software. Students follow interactive on-screen instructions to work with their photographs from the previous lesson. Specifically, students will find their photograph. Then they will copy and paste the photograph into a new folder. They will rename the photograph.

Finally, students are reminded about their homework assignment to have their parent or guardian sign their computer lab contract. They will turn in their signed computer lab contract in Lesson 5.

Lesson Five

Students will use step-by-step instructions on the Log On form to practice logging-on to the workstation, and then begin lesson five. Note that while most of the course content is delivered via 7-activity units, the IT21 Introduction Unit is a 5-activity unit.

The teacher will collect all signed and dated computer lab contracts.

Students will use interactive multimedia presentations to review basic information technology concepts.

Students will use interactive multimedia presentations to learn more about assessment. They will answer the unit essential questions, as they did in Lesson 1. Then they will discover rubrics and learn how rubrics are used in the course. Students will learn about tests. They will then take a lesson post-test and close out the unit. Students will also complete Student Peer/Self Evaluation forms.

Spreadsheets

Lesson One

Students will answer essential questions about spreadsheets. They will answer these questions again at the end of the unit.

Students will use interactive multimedia presentations that present an overview of the unit content, including such topics as what spreadsheets are, how they are used, the parts of a spreadsheet, and spreadsheet terminology.

Students will open spreadsheet software and use the Help feature to gain troubleshooting experience, while at the same time learning more about spreadsheets.

Lesson Two

Students will use interactive multimedia presentations that present the students' roles as owners of a baseball team and the many ways in which they will use spreadsheets in this role.

As part of their roles as owners of a baseball team, students follow interactive on-screen instructions to use spreadsheet software as they complete the payroll for the part-time ballpark employees. Students will learn that, once created, a spreadsheet can be used over and over again to perform accurate and speedy calculations.

Students will then use the payroll spreadsheet to perform a what-if analysis as they preview a sample showing what would happen if they increased the pay rate by 3% or 5%.

Lesson Three

Continuing in their role as owners of a baseball team, students follow interactive on-screen instructions to use spreadsheet software as they manage the ballpark's concession stand inventory.

They will use the spreadsheet to find the number of items in stock. Students will then utilize the IF function to find which items should be ordered.

Finally students will sort the items by two categories—first, by which items need to be ordered, and second, by which items have the longest shipping time and, therefore, need to be ordered first.

Lesson Four

Students learn that as owners of a baseball team, it is also necessary for them to keep track of their team's statistics. Students learn about earned run averages (ERA's) and batting averages.

Students follow interactive on-screen instructions to use spreadsheet software as they find each pitcher's ERA. They will then analyze the data to choose the pitcher with the best ERA for an upcoming game.

Next, students will use a second spreadsheet in the team statistics workbook to find each player's batting average. Students sort and then chart the players' individual batting averages to post in the locker room.

Finally, they learn about batting order and an example of a batting order strategy. Students analyze the batting order data and apply the strategy to determine the batting order for an upcoming game.

Lesson Five

Once again, as owners of a baseball team, students follow interactive on-screen instructions to use spreadsheet software as they calculate and analyze the percent of increase in attendance over the past few years.

Students then use what they find to predict the attendance for the upcoming year. Then they determine whether or not they will have enough seating in the ballpark to accommodate the attendance growth.

Lesson Six

As their last action in their role as owner of a baseball team, students follow interactive on-screen instructions to use spreadsheet software as they "crunch the numbers" for some options for expanding the seating in the ballpark to accommodate the attendance growth as predicted in the previous lesson.

Students select the best option and then copy the spreadsheet table. They open a memo in word processing software, address it to the board of directors, paste the spreadsheet table, and then state which option they recommend.

Finally, students edit the memo to include their reasons for selecting the option they have chosen.

Lesson Seven

Students will answer the unit essential questions, as they did in Lesson 1. They will then take a lesson post-test and close out the unit. Students will also complete Student Peer/Self Evaluation forms.

Rubric

A rubric has been included in this unit for evaluating students' work in Lessons 5 and 6.

Databases

Lesson One

Students will answer essential questions about databases. They will answer these questions again at the end of the unit.

Students will use interactive multimedia presentations that present an overview of the unit content, including such topics as what databases are and how they are used.

Students will open database software and use the Help feature to gain troubleshooting experience, while at the same time learning more about databases.

Finally, students are given a homework assignment to collect data from at least five contacts. They will include these contacts in a personal address book that they will create in later lessons.

Lesson Two

Students will use interactive multimedia presentations that present more information about databases, including such topics as the parts of a database and queries.

Students follow interactive on-screen instructions to open database software. Once inside the database software, students open the customer database for the International Pizza company.

They use a wizard to design a query to find all customers who order pizza five or more times each month. Then students run the query. Students will use the query as the basis for a report and a mail merge letter that they will complete in the next lesson.

Finally, students are reminded about their homework assignment to collect data from at least five contacts. They will include these contacts in a personal address book that they will create in later lessons.

Lesson Three

In this lesson, students continue to learn about databases, specifically reports. Students follow interactive on-screen instructions to use database software as they generate a report of mailing labels, based on the query they ran in the previous activity.

Then students merge their query data with a letter to create personalized letters to each International Pizza customer who orders five or more pizzas each month.

Finally, students are reminded about their homework assignment to collect data from at least five contacts. They will include these contacts in a personal address book that they will create in later lessons.

Lesson Four

Students follow interactive on-screen instructions to develop plans for personal address book databases. Students learn the value of planning a database on paper before using the software.

Through a series of examples and questions and using the data they collected as a homework assignment, students state the purpose of their databases. Then they list the field names that they will include in their databases.

Students will use their database plans in the next lesson to create their databases in software.

Lesson Five

Students follow interactive on-screen instructions to use database software as they create and design their own address book databases.

Using their database plans from the previous lesson, students first create a table. Students learn about and use input masks to fine tune their database fields.

Finally, students learn about and then create forms to ease data entry, which students will do in the next lesson.

Lesson Six

Using the databases and forms that they created in the previous lesson, students follow interactive on-screen instructions to enter their contact data into their own address book databases.

Then students generate reports listing each contact's birthday and name with the birthdays in chronological order.

Lesson Seven

Students will answer the unit essential questions, as they did in Lesson 1. They will then take a lesson post-test and close out the unit. Students will also complete Student Peer/Self Evaluation forms.

Rubric

A rubric has been included in this unit for evaluating students' work in Lessons 4, 5, and 6.

Telecommunications and Ethics

Lesson One

Students will answer essential questions about telecommunications and ethics. They will answer these questions again at the end of the unit.

Students will use interactive multimedia presentations that present an overview of the unit content, including such topics as the definition of telecommunications and how it is used. They will learn about how people communicated prior to telecommunications. Students will examine ways in which people use telecommunications to manage their lives, to work, and to learn.

Students will use interactive multimedia presentations that present an introduction to how computers can be connected by networks. They will understand the implications of connecting computers. Students will recognize basic issues related to network security, including viruses and computer hacking. And they will identify measures used to protect computer networks.

Lesson Two

Students will use interactive multimedia presentations that present basic information about the communication process. They will observe an animated example of feedback in a conversation.

Students will use interactive multimedia presentations that compare traditional communication to e-mail communication. They will learn how messages are sent and received.

Students will use interactive multimedia presentations to understand how telecommunications can present barriers to communication. They will examine how network etiquette, or netiquette, can provide guidance when communicating with telecommunications.

Students follow interactive on-screen instructions to use e-mail simulation software to practice creating and sending an e-mail message. They will simulate sending an e-mail message to the President of the United States. Students will learn about e-mail addresses, domains, and parts of an e-mail message.

Lesson Three

Students will use interactive multimedia presentations that present the importance of exhibiting ethical behaviors when using telecommunications. They will discover how to be honest, respectful, and responsible. Students will understand responsible and irresponsible uses of networks. They will learn about other issues related to the ethical use of technology, including access of information, privacy concerns, protection of personal information, ownership issues, safety, and legal questions.

Students will use interactive multimedia presentations to gain experience making ethical decisions about telecommunications. They will listen as another student presents a Case Study of an ethical dilemma about telecommunications. Then students follow interactive on-screen instructions to use e-mail simulation software to create and send a response to the Case Study. Finally, students complete the Case Study by observing how the student resolved the dilemma.

Lesson Four

Students will use interactive multimedia presentations to understand that people form communities. They will explore ways to communicate as part of an electronic community. They will identify several types of electronic communities, including newsgroups, mailing lists, and chat. Students follow interactive on-screen instructions to open an e-mail message. They will explore an electronic community's Web site.

They will use interactive multimedia presentations to learn the value of an Acceptable Use Policy. Then students will follow interactive on-screen instructions to view an electronic community's Acceptable Use Policy and a school's Acceptable Use Policy.

Lesson Five

Students will discover that they will create a list of guidelines for acceptable computer use. Then students will use interactive multimedia presentations that present an overview of the writing process, including prewriting, drafting, revising, editing, and publishing. They will use the writing process to create their guidelines.

Students follow interactive on-screen instructions to practice prewriting techniques, including brainstorming and organizing.

Then students open word processing software. Students draft a list of guidelines for ethical computer use, which students use in the next lesson. Finally, they print a copy of the list.

Lesson Six

Using the draft list of guidelines that they created in the previous lesson, students follow interactive on-screen instructions to revise their list with word processing software. They will add, move, and delete text in their guidelines.

Then students follow interactive on-screen instructions to edit their list. They will practice using the automatic spelling and grammar checker. Then students will publish a printed copy of the guidelines.

Finally, students use an interactive multimedia presentation to learn about sending e-mail attachments. Students follow interactive on-screen instructions to use e-mail simulation software to create an e-mail message with an attachment. They will simulate sending a copy of their guidelines as an attachment.

Lesson Seven

Students will answer the unit essential questions, as they did in Lesson 1. They will then take a lesson post-test and close out the unit. Students will also complete Student Peer/Self Evaluation forms.

Rubric

A rubric has been included in this unit for evaluating students' work in Lessons 5 and 6.

Word Processing

Lesson One

Students will answer essential questions about word processing. They will answer these questions again at the end of the unit.

Students will use interactive multimedia presentations that present an overview of the unit content, including such topics as what word processing is and how it is used.

Students will open word processing software and use the Help feature to gain troubleshooting experience, while at the same time learning more about word processing.

Then students will use word processing software to add a header and footer to a document. They will paginate their document.

Finally, students will save the document. They will use the same document in later lessons.

Lesson Two

In this lesson, students learn how word processing software allows people to type and save information.

Students will use an interactive multimedia presentation that presents information about heroes. They will use this information as a basis for a word processing project.

Students follow interactive on-screen instructions to practice gathering resources from an electronic source. They will research heroes using a Web site database. They will access, view, and print information from the Web site to help write an essay about a personal hero.

Students follow interactive on-screen instructions to use word processing software as they create titles in their document. Then they will draft an essay. Students will include the essay in a hero booklet they will create in later lessons.

Lesson Three

In this lesson, students learn about the tools word processing software provides to revise and edit documents. Students follow interactive on-screen instructions to use word processing software to practice revising techniques, such as cutting, pasting, inserting, and deleting text in their essay.

Students will then use advanced word processing techniques to edit the essay. They will learn about word choice and use the thesaurus function to edit a word. Students will edit spelling and grammar with the automatic spelling and grammar checker tool. They will also use the word processing software word count feature.

Students will learn about using graphics in word processing documents. Then they will import a photograph into their essay. They will format the photograph by selecting a text wrap style.

Finally, students will learn about using the school computer network as a tool for collaboration with their peers. They will save their hero essay on the network. Students will include the essay in a hero booklet that they will create in later lessons.

Lesson Four

In this lesson, students learn how word processing software is ideal for large documents. They follow interactive on-screen instructions to use word processing software as they create a large document, specifically a booklet of hero essays. Students will gather essays saved by their peers on the school computer network.

Students will use the organizational format of an outline to manage the essays they gather from the network. Students will use their hero booklet to continue to explore word processing in later lessons.

Lesson Five

Students will use interactive multimedia presentations that present content about formatting documents, specifically font style, font size, bold, italics, and underline styles.

Using the word processing document that they created in the previous lesson, students follow interactive on-screen instructions to begin formatting their booklets. They will create a title page and experiment with the appearance of the title page text.

Students follow interactive on-screen instructions to demonstrate how alignment and line spacing affect the appearance of their document. They will center and double-space the title page text. Students will add section and page breaks to create a multi-sectioned document.

Finally, students learn about styles and how to format a style. They will practice altering the style of their titles.

Lesson Six

Students follow interactive on-screen instructions to continue formatting their booklets. They will learn about margins and then will alter the page set-up by increasing the left margin of their booklet. They will discuss issues related to paper orientation and paper size.

Then students will learn about using a table of contents in large documents. They will insert a table of contents into their booklet.

Finally, students will discover how to use the print preview feature. And they will publish a completed booklet of class heroes.

Lesson Seven

Students will answer the unit essential questions, as they did in Lesson 1. They will then take a lesson post-test and close out the unit. Students will also complete Student Peer/Self Evaluation forms.

Rubric

A rubric has been included in this unit for evaluating students' work in Lessons 2, 3, 4, 5, and 6.

Computer Research

Lesson One

Students will answer essential questions about research. They will answer these questions again at the end of the unit.

Students will use an interactive multimedia presentation that presents an overview of the unit content, including such topics as what research is and why it is important.

Students will use an interactive multimedia presentation that presents information about research sources. Specifically, students will learn about source mediums as well as primary and secondary sources.

Students will also use an interactive multimedia presentation that presents information about finding sources in libraries when researching. Specifically, students will learn about library organization, library card catalogs and online catalogs, call numbers and library classification systems, and library indexes and abstracts.

In addition, students will use an interactive multimedia presentation that presents information about finding information in print sources. Specifically, students will learn about tables of contents and indexes.

Lesson Two

Students will use an interactive multimedia presentation that presents information about finding sources on the Internet when researching. Specifically, students will learn about the Internet's convenience; the World Wide Web, or WWW; and Web sites and Web pages. Students will also learn about using Web browsers to find Web sites and Web pages. In addition, they will discover how to find Web sites and Web pages using Universal Resource Locators, or URLs.

Students will then practice finding a Web site using its URL. They will also practice bookmarking Web pages, using hyperlinks to connect to additional information on the Web, and organizing bookmarks.

Lesson Three

Students will use an interactive multimedia presentation that presents information about finding Web sites and Web pages using directories.

Students will then practice finding Web sites using a directory.

Students will also use an interactive multimedia presentation that presents information about finding Web sites and Web pages using search engines.

Students will then practice finding Web sites using a search engine. Specifically, students will learn how to refine a search by using more than one keyword, using keyword phrases, and using Boolean connectors.

Lesson Four

Students will use an interactive multimedia presentation that presents information about evaluating sources. They will also learn about copyright, with an emphasis on “fair use.” In addition, students will discover how to record bibliographies for different sources, with an emphasis on creating bibliography cards.

Students will then practice recording sources’ bibliographies on bibliography cards. Specifically, students will record bibliographies for a book, a CD-ROM article, and a Web page.

Students will also use an interactive multimedia presentation that presents information about taking notes on sources, with an emphasis on creating note cards.

Students will then practice taking notes from a source on note cards. Specifically, students will take paraphrased and quoted notes.

Lesson Five

Students will use an interactive multimedia presentation that presents the students’ roles as members of their school’s GlobeTrotters club, which travels to international destinations. In order to choose a location for the next trip, each member must research the country he or she would most like to visit.

First, students will choose the country they would most like to visit.

Then, students will find *at least three* Web sites or Web pages about the country’s land, people, and attractions. They will evaluate the Web sites and Web pages that are found and bookmark them.

Finally, students will record the Web sites and Web pages’ bibliographies on bibliography cards.

Lesson Six

Continuing in their role as members of their school’s GlobeTrotters club, students will take *at least five* notes from each of their bookmarked Web sites and Web pages on note cards. Specifically, students will take notes on the country’s land, people, and attractions.

NOTE: If students will be doing the Multimedia Presentations Unit, they will present their research from the Research Unit by creating multimedia presentations. Then, the class will vote on the most enticing presentation in order to determine the location for the GlobeTrotters’ next trip.

Lesson Seven

Students will answer the unit essential questions, as they did in Lesson 1. They will then take a lesson post-test and close out the unit. Students will also complete Student Peer/Self Evaluation forms.

Rubric

A rubric has been included in this unit for evaluating students' work in Lessons 5 and 6.

Information Management and Evaluation

Lesson One

Students will answer essential questions about managing and evaluating information. They will answer these questions again at the end of the unit.

Students will use an interactive multimedia presentation that presents an overview of the unit content, including such topics as the importance of evaluating information for validity; freedom of speech and intellectual freedom; and evaluating information for usability, timeliness, relevance, accuracy, appropriateness, authority, comprehensiveness, and bias.

Students will use an interactive multimedia presentation that presents information about the Web as the most powerful source of information.

Students will use an interactive multimedia presentation that presents information about the advantages and disadvantages of Web-based information.

Lesson Two

Students will use an interactive multimedia presentation that presents information about how to evaluate the usability of Web-based information. Specifically, students will learn about downloading; organization; design; grammar, etc.; hyperlinks, and search function.

Students will follow interactive on-screen instructions to practice evaluating the usability of a Web site.

Students will use an interactive multimedia presentation that presents information about how to evaluate the timeliness of Web-based information.

Students will follow interactive on-screen instructions to practice evaluating the timeliness of a Web site.

Lesson Three

Students will use an interactive multimedia presentation that presents information about how to evaluate the relevance of Web-based information.

Students will follow interactive on-screen instructions to practice evaluating the relevance of a Web site.

Students will use an interactive multimedia presentation that presents information about how to evaluate the accuracy of Web-based information. Specifically, students will learn about support, editing, and other sources.

Students will follow interactive on-screen instructions to practice evaluating the accuracy of a Web site.

Students will use an interactive multimedia presentation that presents information about how to evaluate the appropriateness of Web-based information.

Students will follow interactive on-screen instructions to practice evaluating the appropriateness of a Web site.

Lesson Four

Students will use an interactive multimedia presentation that presents information about how to evaluate the authority of Web-based information. Specifically, students will learn about author and sponsor.

Students will follow interactive on-screen instructions to practice evaluating the authority of a Web site.

Students will use an interactive multimedia presentation that presents information about how to evaluate the comprehensiveness of Web-based information. Specifically, students will learn about scope and depth.

Students will follow interactive on-screen instructions to practice evaluating the comprehensiveness of a Web site.

Students will use an interactive multimedia presentation that presents information about how to evaluate the bias of Web-based information. Specifically, students will learn about purpose, point of view, and advertising.

Students will follow interactive on-screen instructions to practice evaluating the bias of a Web site.

Lesson Five

Students will use an interactive multimedia presentation that presents the students' roles as editorial assistants for TotalTeen magazine. Their next assignment is to write a review of a Web site on a current, controversial topic.

First, students will find a Web site about a current, controversial topic.

Then, students will evaluate the Web site for validity by filling out the Web Site Evaluation form.

Lesson Six

Continuing in their role as editorial assistants for TotalTeen magazine, students will write a review of the Web site they evaluated in the previous lesson.

First, students will organize their ideas for their review of the Web site using an AES worksheet.

Second, students will write their review of the Web site using word processing software.

Third, students will improve their review of the Web site.

Finally, students will print their review of the Web site.

NOTE: If students will be doing the Desktop Publishing Unit, they will insert their review of the Web site into the magazine that they create.

Lesson Seven

Students will answer the unit essential questions, as they did in Lesson 1. They will then take a lesson post-test and close out the unit. Students will also complete Student Peer/Self Evaluation forms.

Rubric

A rubric has been included in this unit for evaluating students' work in Lessons 5 and 6.

Multimedia Presentations

Lesson One

Students will answer essential questions about multimedia presentations. They will answer these questions again at the end of the unit.

Students will use interactive multimedia presentations that present information about multimedia presentations. Students will learn about types of media, specifically text, sound, still images, animation, and video. They will also learn about the purposes and uses of multimedia presentations. In addition, students will learn about the characteristics of effective multimedia presentations. Specifically, they will learn that effective multimedia presentations have a distinct purpose, are directed toward a specific audience, are clear, and are interesting.

Students will use an interactive multimedia presentation that presents the students' role as members of their school's GlobeTrotters club, which travels to international destinations. In order to choose a location for the next trip, each member previously researched the country he or she would most like to visit. Now each member must present his or her research in a multimedia presentation. Following the presentations, the club will vote a location for the next trip.

Students will review their research note cards. Specifically, students will determine which country they chose as the one they would most like to visit. Then, they will group their note cards according to the country's land, people, and attractions.

NOTE: If students completed the Computer Research Unit, they will use their bibliography cards and note cards from that unit to create their multimedia presentation. If students did *not* complete the Computer Research Unit, they will use one of the sets of bibliography cards and note cards supplied with the Multimedia Presentations Unit.

Lesson Two

Continuing in their role as members of their school's GlobeTrotters club, students will plan their multimedia presentation.

Students will use interactive multimedia presentations that present information about purpose and audience, angle, and organization.

Students will determine an attention-getting angle from which to present their multimedia presentation's information. Then, they will organize their multimedia presentation into introduction, body, and conclusion slides.

Students will use interactive multimedia presentations that present information about design templates and layout templates.

Using multimedia presentation software, students will choose a design template for their multimedia presentation. Then, they will choose a layout template for each slide in their multimedia presentation.

Lesson Three

Continuing in their role as members of their school's GlobeTrotters club, students will insert text into their multimedia presentation.

Students will use an interactive multimedia presentation that presents information about text.

Using multimedia presentation software, students will insert text into their multimedia presentation. Then, they will check the text's spelling.

Lesson Four

Continuing in their role as members of their school's GlobeTrotters club, students will select and insert visuals into their multimedia presentation.

Students will use an interactive multimedia presentation that presents information about visuals.

Using multimedia presentation software, students will select and insert illustrations, photographs, animation, and video into their multimedia presentation.

Students will use an interactive multimedia presentation that presents information about slide transitions.

Using multimedia presentation software, students will choose a transition for the slides in their multimedia presentation.

Lesson Five

Continuing in their role as members of their school's GlobeTrotters club, students will insert sound into their multimedia presentation.

Students will use an interactive multimedia presentation that presents information about sound, specifically narration.

Using multimedia presentation software, students will insert narration into their multimedia presentation.

Students will use an interactive multimedia presentation that presents information about packaging.

Using multimedia presentation software, students will watch their completed multimedia presentation. Then, they will print a handout of their completed multimedia presentation.

Lesson Six

Continuing in their role as members of their school's GlobeTrotters club, students will watch other GlobeTrotter members' multimedia presentations. Then, they will assess each multimedia presentation. Following this, students will vote for the most persuasive multimedia presentation.

Lesson Seven

Students will answer the unit essential questions, as they did in Lesson 1. They will then take a lesson post-test and close out the unit. Students will also complete Student Peer/Self Evaluation forms.

Rubric

A rubric has been included in this unit for evaluating students' work in Lessons 1, 2, 3, 4, and 5.

Desktop Publishing

Lesson One

Students will answer essential questions about desktop publishing. They will answer these questions again at the end of the unit.

Students will use interactive multimedia presentations that present an overview of the unit content, including such topics as what desktop publishing is and its advantages and disadvantages. Students examine the desktop publishing process.

Students will open desktop publishing software and use the Help feature to gain troubleshooting experience, and at the same time they will learn more about desktop publishing.

Students will use interactive multimedia presentation that presents the students' roles as editorial assistants for *TotalTeen* magazine. They will receive a simulated e-mail message that presents their assignment to help to finish the magazine.

Finally, students will use desktop publishing software to open a copy of the magazine. They will review the *TotalTeen* document. They will use the same document in later lessons.

Lesson Two

In this lesson, students use the desktop publishing process to plan for their magazines.

Students will use an interactive multimedia presentation that presents information about desktop publishing design. They will learn about objective, audience, and tone.

They will work with a partner to evaluate the design for one of three layouts. They will identify the audience, objective, and tone for the layout. Then they will share their ideas with their peers in a teacher-led class discussion about how design can be used to convey a message.

Continuing in their role as editorial assistants for *TotalTeen* magazine, students will think about the objective, audience, and tone of the magazine. Then they will use desktop publishing software to begin creating their magazines. Students will add a header to a master page. They will also add other basic text to the magazine.

Lesson Three

In this lesson, students use the desktop publishing process to create their magazines.

Students will use interactive multimedia presentations that present ways that the appearance of text can be used to communicate effectively. Then students will use an interactive multimedia presentation to match font styles to characters experiencing specific emotions or attitudes.

Continuing in their role as editorial assistants for *TotalTeen* magazine, students will use file management software to retrieve a Web site review article. Students may have created the article in the Manage and Evaluate Information unit. Students will insert this word processed file into the magazine.

Students will resize a text box. Then they will create columns in the text box.

Students will use interactive multimedia presentations to learn about using fonts to change the appearance of text. They will understand how to select fonts. They will work with the body font of the Web site review article. Then students will work with impact fonts when they change the magazine masthead.

Lesson Four

In this lesson, students use the desktop publishing process as they continue to create their magazines.

Students will use interactive multimedia presentations that present ways that graphics can be used to communicate effectively.

Continuing in their role as editorial assistants for *TotalTeen* magazine, students will use desktop publishing software to select and insert a clip art graphic into the magazine. Students will move and resize the graphic. They will practice working with a variety of text wrapping styles and select a text wrapping style for their graphic.

Finally, students will print a draft copy of the magazine.

Lesson Five

In this lesson, students use the desktop publishing process to finish creating their magazines. Then they begin editing the magazines.

Students follow interactive multimedia presentations to learn about ways that color can be used to communicate effectively. Continuing in their role as editorial assistants for *TotalTeen* magazine, students will use desktop publishing software to select a color scheme for the magazine. They will learn about spot color printing. And they will print a spot color page from the magazine.

Students will use interactive multimedia presentations that present information about editing. Students will follow interactive on-screen instructions to mark edits on the draft magazine printout.

Lesson Six

In this lesson, students use the desktop publishing process to finish editing their magazines. Then they publish final copies of the magazines.

Students will use desktop publishing software to implement the edits they marked in the previous lesson. Then students will edit spelling with the automatic spelling checker.

Students will use interactive multimedia presentations that present information about publishing. They will publish a printed final copy of their *TotalTeen* magazine for sharing inside and outside of the classroom.

Lesson Seven

Students will answer the unit essential questions, as they did in Lesson 1. They will then take a lesson post-test and close out the unit. Students will also complete Student Peer/Self Evaluation forms.

Rubric

A rubric has been included in this unit for evaluating students' work in Lessons 2, 3, 4, 5, and 6.

Computer Graphics

Lesson One

Students will answer essential questions about computer graphics. They will answer these questions again at the end of the unit.

Students will use interactive multimedia presentations that present an overview of the unit content, including such topics as what graphics and computer graphics are and how they are used to communicate information. They will also learn about graphic devices, particularly scanners. Students will receive a scanner assignment that they must complete before Lesson 6.

Students will open paint software and use some of the paint program tools to begin creating an original graphic. They will complete the graphic in Lesson 2.

Students who signed up to use the scanner during Class 1 will use the scanner to complete the scanner assignment.

Lesson Two

In this lesson, students will use an interactive multimedia presentation that presents information about paint program tools while they continue using a paint program to complete the original graphic that they began in Lesson 1.

Students who signed up to use the scanner during Class 2 will use the scanner to complete the scanner assignment.

Lesson Three

In this lesson, students use an interactive multimedia presentation that presents information about clip art graphics.

Students will insert appropriate clip art graphics into a Microsoft Word document. Then they will practice customizing graphics by applying text wrap features, adjusting the position, size, and rotation of the graphic.

Students will create a graphic from text using WordArt.

Students who signed up to use the scanner during Class 3 will use the scanner to complete the scanner assignment.

Lesson Four

In this lesson, students use an interactive multimedia presentation to learn about their role as candidates for class president. Students will create a plan on paper for a campaign debate flyer that will include paint graphics, clip art graphics, WordArt graphics, and a scanned graphic.

Students who signed up to use the scanner during Class 4 will use the scanner to complete the scanner assignment.

Lesson Five

In this lesson, students begin implementing their campaign debate flyer plan by using either a paint program or a word program. Once students select an application, they can use general, on-screen directions that guide them towards creating the elements necessary to create the flyer. Students will finish their flyers in Lesson 6.

Students who signed up to use the scanner during Class 5 will use the scanner to complete the scanner assignment.

Lesson Six

In this lesson, students finish creating the campaign debate flyers that they began in Lesson 5. They will complete their flyers by using either a paint program or a word program. Once students select an application, they can use general, on-screen directions that guide them towards creating the elements necessary to create the flyer.

Lesson Seven

Students will answer the unit essential questions, as they did in Lesson 1. They will then take a lesson post-test and close out the unit. Students will also complete Student Peer/Self Evaluation forms.

Rubric

A rubric has been included in this unit for evaluating students' work in Lessons 4, 5, and 6.

Web Publishing

Lesson One

Students will answer essential questions about Web publishing. They will answer these questions again at the end of the unit.

Students will use interactive multimedia presentations that present an overview of the unit content, including such topics as what Web publishing is and how Web publishing is used to communicate information. They will use the Internet to observe actual Web sites. Students will learn about the Web publishing process.

Students will open Web publishing software and use the Help feature to gain troubleshooting experience, while at the same time learning more about Web publishing.

Students will use an interactive multimedia presentation that presents the students' assignment to create a Web site. Then students will use Web publishing software to open a copy of the template Web site. They will add student information to the site and practice copying and pasting. Finally, students will review the Web site document. They will use the same document in later lessons.

Lesson Two

In this lesson, students plan for their Web sites.

Students will use an interactive multimedia presentation that presents information about planning Web sites. They will learn about audience, objective, and tone. Students discover the audience, objective, and tone for their Web sites.

Students will use a form to plan for their each page of their Web site. Then they will gather resources for the Web site using the AES Virtual Explorer.

Students will use Web publishing software to experiment with design styles. They will select a design style for the Web site that is appropriate for its audience, objective, and tone.

Lesson Three

In this lesson, students create their Web sites.

Students will use an interactive multimedia presentation that presents information about creating Web sites. They will learn about HTML and Web authoring software.

Students will also learn about developing content for Web sites. Using Web publishing software, students will write text for their site. Students will then insert graphics, including images and animation, into the site. They will also format the graphics.

Lesson Four

In this lesson, students continue creating their Web sites. Then students proof their Web sites.

Students will use interactive multimedia presentations that present content about connecting information and creating hyperlinks. Students will use Web publishing software to insert hyperlinks into their Web site.

Students will use interactive multimedia presentations that present content about proofing Web sites. Students follow interactive on-screen instructions to proof their Web site. Then students will edit spelling with the automatic spelling checker. They will use the design checker to continue to find and correct design edits.

Finally, students will print a copy of the Web site.

Lesson Five

In this lesson, students test and publish their Web sites.

Students will use interactive multimedia presentations that present content about testing Web sites. Students follow interactive on-screen instructions to test their Web sites. They will mark errors on their Web site printout. Students will use Web publishing software to correct any errors found during testing.

Students will use interactive multimedia presentations that present content about publishing Web sites and the date of posting. Students will use Web publishing software to add a date of posting. And students will simulate publishing their Web sites.

Lesson Six

In this lesson, students use the Web publishing process to update their Web site. They learn about their assignment and then follow interactive multimedia presentations that present content about updating Web sites.

Students will plan for the new page of their Web site using a form.

Students will use Web publishing software to add a page to their Web sites. They will write text for the new page. They will also insert and format a personal photo. Students will use interactive multimedia presentations that present content about personal safety on the Internet.

Students follow interactive on-screen instructions to proof their new Web page. Then students will edit spelling with the automatic spelling checker tool.

Students follow interactive on-screen instructions to test their Web sites.

Students will use interactive multimedia presentations that present content about the date of revision. Students will use Web publishing software to add a date of revision. Finally, students will simulate publishing their updated Web sites.

Lesson Seven

Students will answer the unit essential questions, as they did in Lesson 1. They will then take a lesson post-test and close out the unit. Students will also complete Student Peer/Self Evaluation forms.

Rubric

A rubric has been included in this unit for evaluating students' work in Lessons 1, 2, 3, 4, 5, and 6.

IT History

NOTE: For the teacher's convenience, this unit can be completed in one lesson, two lessons, or three lessons.

Lesson One

The teacher will conduct an introduction to IT history class discussion.

Students will use an interactive multimedia presentation that presents the students' assignment to research an IT history topic using the World Wide Web.

First, students will get their IT history topic.

Then, students will find at least one Web site or Web page that answers the following questions about the IT history topic: What?, When?, and Importance? They will evaluate the Web site(s) and/or Web page(s) and bookmark it (them).*

Following this, students will record the Web site(s) and/or Web page(s) bibliography(ies) on a bibliography card(s).

Finally, the students will take at least three notes on the bookmarked Web site(s) and/or Web page(s) on note cards. Specifically, students will take notes that answer the following questions about the IT history topic: What?, When?, and Importance?*

If the unit is being completed in one lesson, the teacher will conduct a summary to IT history class discussion. Specifically, the class will discuss the following key ideas: IT has been growing at an increasing rate throughout history. IT has been affecting society throughout history.

* Students may find Web site(s) and/or Web page(s) that also answer the following optional questions about the IT history topic: Who?, Where?, Why?, and How?

** Students may also take notes that answer the following optional questions about the IT history topic: Who?, Where?, Why?, and How?

Lesson Two

Students will use an interactive multimedia presentation that presents the students' assignment to create a report on the IT history topic using word processing software.

First, students will review their note cards. Specifically, students will group their note cards according to which of the following questions they answer about the IT history topic: What?, When?, and Importance?*

Then, students will create their report on the IT history topic using word processing software by answering the following questions about the topic: What?, When?, and Importance?*

Following this, students will print their report on the IT history topic.

Finally, if the unit is being completed in three lessons, students may practice the presentation of their report on the IT history topic in pairs.

If the unit is being completed in two lessons, the teacher will conduct the students' posting of their reports on the IT history topic. Specifically, the students will post their reports above/below the IT History timeline.

If the unit is being completed in two lessons, the teacher will also conduct a summary to IT history class discussion. Specifically, the class will discuss the following key ideas: IT has been growing at an increasing rate throughout history. IT has been affecting society throughout history.

* Students may also group their note cards according to which of the following optional questions they answer about the IT history topic: Who?, Where?, Why?, and How?

** Students may create their report on the IT history topic using word processing software by also answering the following optional questions about the topic: Who?, Where?, Why?, and How?

Lesson Three

The teacher will present the students' assignment to present their report on the IT history topic to the class.

First, the teacher will conduct the students' presenting of their reports on the IT history topics. Specifically, the students will take their places on the IT History timeline. Then, they will chronologically present their reports. Following this, they will post their reports above/below the timeline.

Then, the teacher will conduct a summary to IT history class discussion. Specifically, the class will discuss the following key ideas: IT has been growing at an increasing rate throughout history. IT has been affecting society throughout history.

IT In Our Lives

NOTE: For the teacher's convenience, this unit can be completed in one lesson, two lessons, or three lessons.

Lesson One

The teacher will conduct an introduction to IT in our lives class discussion.

Students will use an interactive multimedia presentation that presents the students' assignment to research an IT topic using the World Wide Web.

First, students will choose their IT topic.

Then, students will find at least one Web site or Web page that address the following aspects about the IT topic: Description, Effects (Pros and/or Cons) on Society, and Future (Potential and/or Limitations). They will evaluate the Web site(s) and/or Web page(s) and bookmark it (them).

Following this, students will record the Web site(s) and/or Web page(s) bibliography(ies) on a bibliography card(s).

Finally, the students will take at least three notes on the bookmarked Web site(s) and/or Web page(s) on note cards. Specifically, students will take notes that address the following aspects about the IT topic: Description, Effects (Pros and/or Cons) on Society, and Future (Potential and/or Limitations).

If the unit is being completed in one lesson, the teacher will conduct a summary to IT in our lives class discussion. Specifically, the class will discuss the following key idea: IT impacts society.

Lesson Two

Students will use an interactive multimedia presentation that presents the students' assignment to create a report on the IT topic using presentation software.

First, students will review their note cards. Specifically, students will group their note cards according to which of the following aspects they address about the IT topic: Description, Effects on Society, and Future.

Then, students will create their report on the IT topic using presentation software by addressing the following aspects about the topic: Description, Effects (Pros and/or Cons) on Society, and Future (Potential and/or Limitations).

Following this, students will print a handout of their report on the IT topic.

Finally, if the unit is being completed in three lessons, students may practice the presentation of their report on the IT topic in pairs.

If the unit is being completed in two lessons, the teacher will conduct the students' posting of their reports on the IT topics. Specifically, the

students will post their reports on the IT In Our Lives web and connect them to their corresponding subcategories.

If the unit is being completed in two lessons, the teacher will also conduct a summary to IT in our lives class discussion. Specifically, the class will discuss the following key idea: IT impacts society.

Lesson Three

The teacher will present the students' assignment to present their report on the IT topic to the class.

First, the teacher will conduct the students' presenting of their reports on the IT topics. Specifically, the students present their reports. Following this, they will post their reports on the IT In Our Lives web and connect them to their corresponding subcategories.

Then, the teacher will conduct a summary to IT in our lives class discussion. Specifically, the class will discuss the following key idea: IT impacts society.

IT Careers

NOTE: For the teacher's convenience, this unit can be completed in one lesson, two lessons, or three lessons.

Lesson One

The teacher will conduct an introduction to IT careers class discussion.

Students will use an interactive multimedia presentation that presents the students' assignment to research an IT career using the World Wide Web.

First, students will get their IT career.

Then, students will find at least one Web site or Web page that addresses the following aspects about the IT career: Job Description, Education and Training, and Salary. They will evaluate the Web site(s) and/or Web page(s) and bookmark it (them).

Following this, students will record the Web site(s) and/or Web page(s) bibliography(ies) on a bibliography card(s).

Finally, the students will take at least three notes on the bookmarked Web site(s) and/or Web page(s) on note cards. Specifically, students will take notes that address the following aspects about the IT career: Job Description, Education and Training, and Salary.

If the unit is being completed in one lesson, the teacher will conduct a summary to IT careers class discussion. Specifically, the class will discuss the following key ideas: There are various IT careers. IT impacts the workplace. IT careers in the community.

Lesson Two

Students will use an interactive multimedia presentation that presents the students' assignment to create an advertisement for the IT career using word processing software.

First, students will review their note cards. Specifically, students will group their note cards according to which of the following aspects they address about the IT career: Job Description, Education and Training, and Salary.

Then, students will create their advertisement for the IT career using word processing software by addressing the following aspects about the career: Job Description, Education and Training, and Salary.

Following this, students will print their advertisement for the IT career.

Finally, if the unit is being completed in three lessons, students may practice the presentation of their advertisement on the IT career in pairs.

If the unit is being completed in two lessons, the teacher will conduct the students' posting of their advertisement for the IT career. Specifically, the students will post their advertisements on the IT Careers classifieds page.

If the unit is being completed in two lessons, the teacher will also conduct a summary to IT careers class discussion. Specifically, the class will discuss the following key ideas: There are various IT careers. IT impacts the workplace. IT careers in the community.

Lesson Three

The teacher will present the students' assignment to present their advertisement for the IT career to the class.

First, the teacher will conduct the students' presenting of their advertisements for the IT careers. Specifically, the students will present their advertisements. Following this, they will post their advertisements on the IT Careers classifieds page.

Then, the teacher will conduct a summary to IT careers class discussion. Specifically, the class will discuss the following key ideas: There are various IT careers. IT impacts the workplace. IT careers in the community.

Basic Computer Functions

Lesson One

Students will use interactive multimedia presentations that present information about the four basic computer functions – input, processing, output, and storage. Specifically, students will identify input devices. They will explore the central processing unit. Students will also identify output devices. In addition, they will explore memory.

Students will use interactive multimedia presentations that present information about hardware and software. Specifically, students will explore system software, namely the operating system, and application software.

Troubleshooting and Maintenance

Lesson One

Students will use interactive multimedia presentations that present information about discovering the importance of maintaining computers in order to prevent computer problems.

Also, students will explore the use of the problem solving method when troubleshooting in order to solve computer problems.