

Matching Technology to User Needs and Budget

Technological Education, Grades 11 and 12 (2009) Grade 11, Computer Technology Workplace (TEJ3E) Computer Technology Fundamentals, Computer Technology Skills, Professional Practice and Career Opportunities

Overview

Students practise skills needed to work as computer consultants. They investigate online computer purchasing. They then work with a “client” and ask key questions about their needs and budget to make recommendations for purchasing a computer system.

The learning experience is presented in a series of five lessons that build and/or reinforce the necessary technical and people skills to complete the task of finding the right type of computer hardware to match both the needs and budget of a client. Students develop the skills they need for e-Commerce and, at the same time, further develop their listening, problem-solving, and communication skills.

Connections to Financial Literacy

Students recognize the relationship between technology and costs and are able to suggest compromises that could be made to stay within a budget.

Students discuss topics connected to consumer awareness and online purchasing. They develop an awareness of the use of credit and risks of fraud in online environment.

Connections to Curriculum

This series of lessons connects with these Overall Expectations in Computer Technology, Grade 11 Workplace (TEJ3E):

A1. Computer Hardware: describe the function and development of a variety of computer hardware

B1. Hardware Solutions: research and determine hardware solutions for users’ computer needs

D3. Customer Service: describe and apply professional customer-service practices

The curriculum expectations addressed in each lesson are identified within the lesson plan. Full curriculum expectations with examples, can be accessed through a hyperlink within the lesson.

Considerations for Planning

The computer purchase task is an open-ended task in which students enhance their knowledge of computer hardware and software and increase their awareness of the financial implications of the acquisition of computer hardware and software.

The topic of money spent on technology can lead to many rich discussions and investigations, depending on the interests and abilities of the students (e.g., in industry - the failure of companies to manage technology costs; computer system problems contributing to bankruptcy; online fraud; warranty and service agreements). For many students, it might be necessary to provide specific examples to support their understanding. Background information is available on the Internet.

Review the school/board policy regarding Internet use and preview websites before students access them during their study.

In discussions, investigations, and sharing findings, teachers need to be sensitive to the students’ cultural and economic backgrounds and the environments in which they live.

Teachers are encouraged to adapt the tasks to meet the learning needs and styles of the students and the community in which they live, offering choice in what the students do, and how they accomplish and respond to their learning (e.g., oral response, written presentation).

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Review of Hardware Functions and Relative Costs <small>Lesson 1</small>		
Students review the components of a personal computer and the associated costs.		
Connections to Financial Literacy		
As students review hardware basics, they become more aware of relative costs of various items of a personal computer.		
Curriculum Expectations	Learning Goals	
<p>Click here to access expectations in full, with examples.</p> <p>Computer Technology Fundamentals</p> <p>A1. Computer Hardware describe the function and development of a variety of computer hardware</p> <p>A1.1 use relevant technical terminology to describe computer hardware</p> <p>A1.2 identify and describe current storage devices</p> <p>A1.3 describe the function of current input and output devices</p>	<p>Students will:</p> <ul style="list-style-type: none"> describe the function of computer hardware and the relative costs associated with different types of computer hardware <p>Sample Success Criterion</p> <p>I can describe the function of the key components of a personal computer.</p>	
Considerations for Planning		
<p>Readiness</p> <ul style="list-style-type: none"> Previous experience using the Internet and a search engine Ability to identify the components of a personal computer 	<p>Terminology</p> <ul style="list-style-type: none"> Computer system Form factor Computer memory Hard drive Video/graphics card Pointing device Keyboard Monitor Operating system 	<p>Materials</p> <ul style="list-style-type: none"> Access to the Internet and a search engine <p>Note: Create a Word Wall so that students have an anchor to return to when dealing with this terminology.</p>

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Review of Hardware Functions and Relative Costs Lesson 1	
Minds On	Connections
<p><u>Small Groups → Discussion</u></p> <p>Working in groups of 3, students discuss the question: What are the most important things to consider when purchasing a home computer?</p> <p>Questions to guide the discussion:</p> <ul style="list-style-type: none"> • What are main components one has to consider when buying a computer? • What are the functions of these key components? • What are all the costs associated with having a home computer? • What items cost the most to upgrade? • What is the best item to upgrade to get the most value for your money? • What are the costs of common software packages? <p><u>Large Group → Discussion</u></p> <p>The small groups report to the whole class the main points of their discussions. On chart paper, generate a list of Computer Purchasing Consultant questions for the students to consider throughout this series of lessons. Post the chart paper in the class to be referred to and revised, as needed.</p>	<p>Possible responses: Internet charges, hardware, software, modem, space at home.</p> <p>Tip Keep a list of the questions generated by students that can be used later when they take on the role of computer consultant.</p>

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Review of Hardware Functions and Relative Costs Lesson 1	
Action!	Connections
<p><u>Small Groups/Pairs/Individually → Research</u></p> <p>The class is given a computer purchasing scenario and, working individually, in pairs or in small groups. They locate information using the Internet, flyers from computer retailers, and other sources.</p> <p>They prepare to share the information with the class in a format of their choice.</p> <p>Because this may be the first time that students research computer configurations, it may be helpful to have all student groups working on the same, relatively straight forward scenario (e.g., Scenario 1). If some student groups have previous experience researching computer configurations, these groups may prefer working on a more complex configuration (e.g., Scenario 2).</p> <p>Scenarios</p> <ol style="list-style-type: none"> 1. Father purchasing a laptop for his 10 year old son's birthday. The child would like to do homework and play online games on the computer. (budget maximum \$400.00) 2. Business purchasing 8 desktop computers for their office plus at least one networked printer. The computers need to have software for word processing, budgeting and to use the internet efficiently (budget maximum \$7000.00) 	<p> Students choose how to share their researched information in a format that suits their learning style (e.g., orally, electronic presentation)</p>
Consolidation	Connections
<p><u>Whole Class → Group Share</u></p> <p>Students share their research. Invite students to ask questions after each presentation.</p> <p>As needed, revise the class list of Computer Consultant Questions.</p>	<p>A for L Observe whether students have sufficient knowledge about computer hardware to proceed with further lessons or if further review is needed. Students should demonstrate an ability to match the needs of the person in the scenario to the computer(s) they have selected for that person.</p>

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Computer Purchase Skills Building Lesson 2

Students use a variety of computer purchasing websites to practise the configuration and purchase of a computer online.

Connections to Financial Literacy

As students examine the technology and methods used for buying computer systems, they become more aware of the cost of technology and where money can best be spent to improve the value of the computer.

Curriculum Expectations

[Click here](#) to access expectations in full, with examples.

Computer Technology Fundamentals

A1. Computer Hardware describe the function and development of a variety of computer hardware

- A1.1** use relevant technical terminology to describe computer hardware

Computer Technology Fundamentals

B1. Hardware Solutions research and determine hardware solutions for users' computer needs

- B1.2** compare availability and costs for hardware from local, national, and/or global suppliers

Learning Goals

Students will:

- configure computer systems and compare costs, using websites from a variety of companies (local, national, and/or global suppliers)

Sample Success Criterion

I can compare costs for configuring a computer system, using a variety of sources

Considerations for Planning

Readiness

- Use the Internet and a search engine

Terminology

- URL (Universal Resource Locator)
- Computer system
- Computer memory
- Hard drive
- Video/graphics card
- Pointing device
- Keyboard
- Monitor
- Operating system

Materials

- Access to the Internet and a search engine
 - Handout: **The Design Process** (Teacher)
- Note:** Post terminology and definitions on the Word Wall.

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Computer Purchase Skills Building Lesson 2	
Minds On	Connections
<p>Whole Class → Discussion</p> <p>Guide a discussion on the use of websites to buy goods.</p> <p>Possible Questions:</p> <ul style="list-style-type: none"> • Have you ever purchased or helped someone purchase goods from a website? • What are the steps in an online purchase? • What are some of the risks of purchasing online? • What are some of the benefits of purchasing online? 	
Action!	Connections
<p>Whole Class → Demonstration</p> <p>Model the use of one online computer configuration tool for choosing a computer. If computers are available, students work along.</p> <p>Pairs → Practice</p> <p>Provide a sample scenario for purchasing a computer: For example: A university student wishes to buy a computer for web browsing, email, and word processing.</p> <p>Working in pairs, students practise completing computer configurations, using a number of Canadian websites.</p> <p>Note: If time permits, partners can complete different configurations at the same retailer's website. They can also complete similar configurations at different retailers' websites to compare costs.</p> <p>Students should compare the questions asked on two or three different online computer purchase websites in order to further develop the list of questions that they need to ask of potential clients.</p> <p>Guide students back to the list of questions they generated earlier in Lesson 1 and encouraged to add any new questions they have found.</p>	<p>Reference Handout: The Design Process (Teacher)</p> <p>Tip</p> <p>The list could be supplemented with other resources that are available within the local community. Resources here might include local flyers or local websites that help people purchase computers to suit their needs.</p> <p>A for L As students practise, look for evidence that they have the skills to navigate websites easily.</p>
Consolidation	Connections
<p>Whole Class → Share Findings</p> <p>Student pairs share their experience. As a class, they discuss issues in using the websites and provide a comparison of different types of companies (e.g., big box stores, specific computer vendors, international, national, regional, and local companies).</p> <p>Add questions to the class list of computer consultant questions as needed.</p> <p>As an extension, discuss the cost of technology and the effect of e-Commerce on buying decisions (e.g., Are there dangers to buying online as compared to a retail store?)</p>	<p>A for L Check to make sure that all students have generated a list of appropriate questions that might be used to interview someone buying a new computer.</p>

The Design Process (Teacher)

In many technological fields, open-ended problem-solving processes that involve the full planning and development of products or services to meet identified needs are often referred to as the “design process”.

A design process involves a sequence of steps, such as the following:

- Analyse the context and background, and clearly define the problem or challenge.
- Conduct research to determine design criteria, financial or other constraints, and availability of materials.
- Generate ideas for potential solutions, using processes such as brainstorming and sketching.
- Choose the best solution.
- Build a prototype or model.
- Test and evaluate the solution.
- Repeat steps as necessary to modify the design or correct faults.
- Reflect and report on the process.

The Ontario Curriculum, Grades 11 and 12, Technological Education, p. 22

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Questioning and Assessing Needs Lesson 3

Students prepare to interview a client regarding his or her computer hardware needs. They learn to look at scope and sequence of questions to make sure they get the information they need to complete a valid computer configuration within the budget.

Connections to Financial Literacy

As students develop a series of questions to establish the user's priorities, they also consider how to inquire about budget issues in a professional manner.

Curriculum Expectations

[Click here](#) to access expectations in full, with examples.

Professional Practice and Career Opportunities

D3. Customer Service describe and apply professional customer-service practices

D3.2 describe the importance of professionalism in customer service

Learning Goals

Students will:

- create an accurate and complete list of questions to get the appropriate information from a client in a professional manner
- create a plan for conducting an interview

Sample Success Criterion

I can use professional customer service practices when I interview a client with prepared questions.

Considerations for Planning

Readiness

- Basic understanding of a budget
- Team collaboration skills
- Ability to use a word processing program or presentation software

Terminology

- Computer system
- Form factor
- Computer memory
- Hard drive
- Video/graphics card
- Pointing device
- Keyboard
- Monitor
- Operating system
- Software

Materials

- Handout: **Computer Buying Consulting Company**

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Questioning and Assessing Needs Lesson 3	
Minds On	Connections
<p>Pairs → Creating Interview Questions</p> <p>Pairs of students review and share the list of questions they have generated in Lessons 1 and 2. They read through their partner's list. After reading their partner's list of questions, they note any questions about their partner's list and any additions they want to make to their own list.</p> <p>Note: Students should be partnered with a student with whom they did not work in Lessons 1 and 2.</p>	<p>A for L Check to make sure that all students have their list of updated questions, prior to beginning this lesson.</p>
Action!	Connections
<p>Whole Class/Small Groups → Preparing for the Interview</p> <p>Introduce the culminating assignment. See Handout: Computer Buying Consulting Company.</p> <p>This activity can be structured in different ways:</p> <p>A. As a whole class activity in which each group takes a turn interviewing one "client" while the other groups listen and make notes in order to gather as much information as possible.</p> <p>B. As a small group activity in which one person in the group role plays a client (or other teachers or drama students can be brought in to play the roles of client). The client profiles can be developed by the students or provided by the teacher.</p> <p>Guide the groups in a review of their questions:</p> <ul style="list-style-type: none"> • Are your questions worded in a professional manner? • Are your questions covering not only specific hardware needs but also funds available, warranty, maintenance, and support? • What is your strategy for responding to the client's questions? • What is your strategy if a client's information isn't clear? • Who will ask the questions for the group? • How will you make sure you record all the information? • How will you organize your notes? <p>Encourage each group to organize itself to make the best use of the members' knowledge and skills.</p>	<p>TI Some groups may need more structure than others in preparing for the interview.</p> <p>A for L Groups reflect on how they have organized themselves to use the skill sets of the group.</p>

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Questioning and Assessing Needs Lesson 3	
Consolidation	Connections
<p><u>Whole Class/Small Groups → Practice Interview</u></p> <p>During a practice interview, groups try out their interview strategy with the teacher acting as the client.</p> <p>As there are multiple groups, all determining the needs of a single client, talk about the importance of all groups listening to the other groups' questions so they hear the same information.</p> <p>As the groups practise, make jot notes to provide oral feedback about the clarity and usefulness of the groups' questions, and their attention to using customer service skills.</p>	<p>A or L During the practice interview, consider:</p> <ul style="list-style-type: none"> • Do students use appropriate customer service skills to conduct the client interview? • Are students able to correctly formulate questions? • Do the students know how to ask questions in an organized fashion? • Do they take complete notes?

Computer Buying Consulting Company

Although technology is used everywhere by almost everybody, many people are still confused when it comes time to buying a new computer. Many people spend more money than they need to on technology they don't fully use.

These are just a few of the issues that many people find confusing:

1. Should I buy a laptop or desktop or tablet?
2. How much disk storage do I need?
3. How much memory do I need?

In role as a small computer consulting group, your group is to help provide the answers by:

- Constructing a list of questions that should be asked of a client who is looking to make a technology purchase. The client will have their own list of needs and an amount that they feel is reasonable to spend.
- Preparing questions and interview with the client along with the other student groups.
- Researching and making a recommendation for what the client should buy, including software.
- Presenting the recommendation to the client in the format of your group's choice that includes a complete configuration, the cost, and the source for purchasing.

Activity	Timeline
Prepare interview questions	
Conduct the interview with the client	
Research and prepare a proposal	
Present the proposal to the client	

Think about the following questions as your group prepares its presentation. The client will use these questions to assess your work.

- Is the suggested computer configuration complete?
- Does the suggested computer configuration meet the budget target?
- Is there a rationale that links the user's needs to the suggested computer configuration?
- Is the suggested computer configuration clearly communicated to the client?

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The Interview Lesson 4

As a class or in their groups, students interview a client to determine computer usage requirements and budget. They listen carefully and record information that they need to make recommendations for a computer system.

Connections to Financial Literacy

Students get the best computer configuration to meet their client's needs, while still staying within budget. They must determine the areas in which compromises can be made in order to stay within budget.

Curriculum Expectations

[Click here](#) to access expectations in full, with examples.

Professional Practice and Career Opportunities

D3. Customer Service describe and apply professional customer-service practices

D3.3 follow appropriate customer-service protocols and procedures

D3.4 communicate with clients using an appropriate level of technical terminology

Learning Goals

Students will:

- communicate with a client in a professional manner
- gather the necessary information to perform a computer configuration task
- use an appropriate level of technical terminology with the client

Sample Success Criterion

I can use a professional manner when communicating with the client.

Considerations for Planning

Readiness

- Understanding of technical terms for computer configuration
- Understanding of cost/benefit
- Team collaboration skills
- Social and communication skills to conduct interview

Terminology

- Computer system
- Form factor
- Computer memory
- Hard drive
- Video/graphics card
- Pointing device
- Keyboard
- Monitor
- Operating system
- Software

Materials

- Group questions prepared for interview
- Handout: **Computer Buying Consulting Company** (from Lesson 3)
- Handout: **Sample Scenarios**
- Handout: **Sample Checklist**

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The Interview Lesson 4	
Minds On	Connections
<p>Small Groups → Finalize Interview Plans</p> <p>Student groups review their questions and interview plan. With the class, review the plan for doing the interview.</p>	
Action!	Connections
<p>Whole Class/Groups of 4 → Conducting the Interview</p> <p>This activity can be structured in different ways:</p> <p>A. As a whole class activity in which each group takes a turn interviewing one “client” while the other groups listen and make notes in order to gather as much information as possible.</p> <p>B. As a small group activity in which one person in the group role plays a client (or other teachers or drama students can be brought in to play the role of the client). The client profiles can be developed by the students or provided by the teacher.</p> <p>Note: Regardless of whether this is structured as a whole class or small group activity, each student in each of the groups will be given a specific role.</p> <p>Two students will take on the role of interviewers (they will ask their questions from a predetermined list of questions decided on by the group).</p> <p>Two students will be the recorders and the person checking to make sure that all questions are covered and that all of the necessary information is collected. They can interject themselves in the interview if necessary.</p> <p>Student groups organize themselves for conducting the interview. One student greets and welcomes the client and the interview begins with each group asking one question followed by an open session.</p> <p>At the end of the interview, one of the students in the group thanks the client.</p>	<p>ALT Circulate throughout the classroom to make sure that the interview process is going smoothly for all of the groups. Where necessary, guide the interview process with questions, such as: Does anyone else have a question about the budget for the computer?</p>

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The Interview Lesson 4	
Consolidation	Connections
<p><u>Small Groups/Whole Class → Debrief of the Interview Process</u></p> <p>Groups check and organize their notes followed by a whole class debriefing session about the information they gathered during their interview. Ask each group to use this information to make decisions about the most appropriate computer configuration to meet the needs of the client from both a computing needs and a budget perspective.</p>	<p>Tip</p> <p>Guide the debriefing discussion, using notes taken during the groups' interview. These notes can be used to determine if the students' solutions in Lesson 5 match the client's expressed needs.</p> <p>A+L Provide written or oral feedback to the individual groups on their success with the interview process, using Handout: Sample Checklist or a simple rubric.</p>

Sample Scenarios

Role Play	Scenario
<p>Mom or dad buying a computer and printer for daughter who is going off to University</p>	<p>Computing Needs/wants:</p> <ul style="list-style-type: none"> • Skype and/or video chat capability • Basic word processing and office functions • Ability to surf the Internet • Watch videos • Software for art and graphic design • Store Photographs and Videos • WiFi <p>Budget Concerns:</p> <ul style="list-style-type: none"> • Does not want to spend more than \$700.00 • Wants to get the best product in that price range • Would prefer an extended warranty but it is not a priority
<p>Elementary School Principal buying 50 new desktop computers for their school</p>	<p>Computing Needs/wants:</p> <ul style="list-style-type: none"> • Video conferencing capability • Basic word processing and office functions • Tutorial learning software for students to use • Ability to run technology that will help students with special education needs (visually impaired students) • Large displays • A server to support networking these computers • Ability to be hardwired as well as have WiFi capability <p>Budget Concerns:</p> <ul style="list-style-type: none"> • Has a budget of \$30,000.00 • Must have extended warranty • Does not need network cable or assistance with the set up of the network • Would prefer to have a new server but can make do with the one that they currently have
<p>Senior Citizen buying a new desktop computer</p>	<p>Computing Needs/wants:</p> <ul style="list-style-type: none"> • Ability to scan and store family photos • A large display and fast processing speed • Ability to stream video from the computer to a television • Ability to store large video files • Ability to support online gaming (for their grandchildren) • WiFi • An ergonomic mouse and an ergonomic keyboard <p>Budget Concerns:</p> <ul style="list-style-type: none"> • Does not want to spend more than \$1000.00 • Wants an extended warranty

Sample Checklist

The student has:	✓
used relevant technical terminology in communications with the client	
compared costs from various sources	
recommended a source and provided a rationale	
matched client hardware needs to a specific configuration	
explained the function of hardware components in the context of the configuration	

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Recommendations and Presentation Lesson 5

Students use information from the interview to research, prepare, and submit a suggested computer configuration individually for their client. If possible, they present their report in person so the client can ask questions. The client reviews all submissions, provides feedback, and selects a recommendation for purchasing a computer system.

Note: This lesson is based on three 75-minute periods.

Connections to Financial Literacy

Students examine comparative costs, value for cost, and purchasing power as they balance the client's wants and needs against the target budget.

Curriculum Expectations

[Click here](#) to access expectations in full, with examples.

Computer Technology Fundamentals

A1. Computer Hardware describe the function and development of a variety of computer hardware

A1.1 use relevant technical terminology to describe computer hardware

A1.2 identify and describe current storage devices

A1.3 describe the function of current input and output devices

Professional Practice and Career Opportunities

D3. Customer Service describe and apply professional customer-service practices

D3.4 communicate with clients using an appropriate level of technical terminology

Learning Goals

Students will:

- describe the function and need for hardware components
- match user needs to a suggested computer configuration that meets stated budget targets
- compare costs from various sources and recommend use of a source for purchasing
- use relevant technical terminology when dealing with a client

Sample Success Criterion

I can use accurate and relevant technical terminology with a client which matches their level of understanding.

Considerations for Planning

Readiness

- Understand financial concepts such as needs and wants, comparative costs, value for cost, and budgets
- Use the Internet and a search engine
- Use a word-processor and presentation software

Terminology

- Computer system
- Form factor
- Computer memory
- Hard drive
- Video/graphics card
- Pointing device
- Keyboard
- Monitor
- Operating system
- Software

Materials

- Access to the Internet and a search engine
- Handout: **Computer Buying Consulting Company** (from Lesson 3)
- Handout: **Sample Checklist** (from Lesson 4)

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Recommendations and Presentation Lesson 5	
Minds On	Connections
<p>Small Groups/Whole Class → Discussion</p> <p>Students meet in their groups to discuss their notes from the interview. Remind students that they must consider all aspects of the task including meeting budget targets.</p>	
Action!	Connections
<p>Small Groups → Investigating Computer Systems</p> <p>Students use the Internet to research computer systems and detail a configuration that both answers the client's needs and meets the budget target. They choose a means of communicating this information to the client (e.g., written report, electronic presentation, webpage, email).</p> <p>Based on the evidence they collected as a group each student decides on the best solution to the scenario that was presented.</p> <p>Students must include:</p> <ul style="list-style-type: none"> • An itemized list of components that would go into the computer and the costs associated with those components. • A rationale for how the recommendations best meets the needs of the client. 	<p>A¹⁵ L While students are researching and creating their recommendations, circulate and provide feedback in roving conferences.</p>
Consolidation	Connections
<p>Groups of 4 → Reporting Recommendations</p> <p>Students form groups of 4 comprised of members from diverse "consultant groups."</p> <p>Each student does a 15-minute presentation in which they describe their client's needs and budget briefly. They then present their computer configuration recommendations.</p> <p>Members of the group ask clarification questions, as needed, to ensure that the presenting student has met all of the success criteria in their configuration recommendations.</p> <p>Students take time to revise their report, as needed, based on the questions and feedback of their group members.</p> <p>Each student completes an individual report of their recommendations and rationalization. Reports can be presented as a written report, oral presentation, or using presentation software.</p>	<p>Tip</p> <p>Encourage students to test out their recommendations with people outside of the class (e.g., friends or family members) to get feedback before presenting findings to the client.</p> <p>A⁰¹ L Assess student learning using Handout: Sample Checklist or rubric co-constructed with students when determining success criteria.</p>

Review of Hardware Functions and Relative Costs Lesson 1

Curriculum Expectations

Technological Education, Grades 11 and 12 (2009)	
Computer Technology Fundamentals	
Overall Expectations	Specific Expectations
A1. Computer Hardware describe the function and development of a variety of computer hardware	A1.1 use relevant technical terminology to describe computer hardware (e.g., processors, memory, drives, monitors, printers) A1.2 identify and describe current storage devices (e.g., hard drives, CD/DVD drives, USB drives) A1.3 describe the function of current input and output devices (e.g., keyboards, mice, tablets, printers, monitors, scanners, webcams)

Computer Purchase Skills Building Lesson 2

Curriculum Expectations

Technological Education, Grades 11 and 12 (2009)	
Computer Technology Fundamentals	
Overall Expectations	Specific Expectations
A1. Computer Hardware describe the function and development of a variety of computer hardware	A1.1 use relevant technical terminology to describe computer hardware (e.g., processors, memory, drives, monitors, printers)
Computer Technology Skills	
Overall Expectations	Specific Expectations
B1. Hardware Solutions research and determine hardware solutions for users' computer needs	B1.2 compare availability and costs for hardware from local, national, and/or global suppliers

Questioning and Assessing Needs Lesson 3

Curriculum Expectations

Technological Education, Grades 11 and 12 (2009)	
Professional Practice and Career Opportunities	
Overall Expectations	Specific Expectations
D3. Customer Service describe and apply professional customer-service practices	D3.2 describe the importance of professionalism in customer service

The Interview Lesson 4

Curriculum Expectations

Technological Education, Grades 11 and 12 (2009)	
Professional Practice and Career Opportunities	
Overall Expectations	Specific Expectations
D3. Customer Service describe and apply professional customer-service practices	D3.3 follow appropriate customer-service protocols and procedures (e.g., procedures for dealing with complaints, troubleshooting, and customer support by telephone, email, or the Internet) D3.4 communicate with clients using an appropriate level of technical terminology

Recommendations and Presentation Lesson 5

Curriculum Expectations

Technological Education, Grades 11 and 12 (2009)	
Computer Technology Fundamentals	
Overall Expectations	Specific Expectations
A1. Computer Hardware describe the function and development of a variety of computer hardware	A1.1 use relevant technical terminology to describe computer hardware (e.g., processors, memory, drives, monitors, printers) A1.2 identify and describe current storage devices (e.g., hard drives, CD/DVD drives, USB drives) A1.3 describe the function of current input and output devices (e.g., keyboards, mice, tablets, printers, monitors, scanners, webcams)
Professional Practice and Career Opportunities	
Overall Expectations	Specific Expectations
D3. Customer Service describe and apply professional customer-service practices	D3.4 communicate with clients using an appropriate level of technical terminology