Learning English with CBC Radio – Living in Alberta

Caring for the Elderly: New Technologies

by

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Integration Enhancement

Topic:	Caring For The Elderly – New Technologies
Lesson:	New Technologies
CLB Level:	6
CLB Skills:	Reading, Writing,
Essential Skill(s):	Reading, Writing, Computer Use, Thinking Skills (Finding Information)

CLB Outcomes	
Reading:	Learners will demonstrate reading comprehension of moderately complex texts on familiar topics. Learners will demonstrate the ability to guess the meaning of unknown terms, phrases or idioms from the context. Learners will demonstrate the ability to identify specific factual details and some implied meanings.
Writing:	Learners will demonstrate the ability to reduce a page of information to a summary. Learners will demonstrate the ability to enter information in a table.
Language Skills	
Grammar Focus:	Learners will demonstrate the ability to identify adjective clauses and adverb clauses.
Vocabulary:	*disoriented, smart pill box, email alert, apps / tweets/ blogs, Range, isolation, risks, mat, emerge, wander, institutional, consequences, overwhelm, undergarments*
Culture New technologies are on the increase in North America. It is important for leaners to be aware of these new technologies and to keep up to date with new information. New technologies are not just for kids and young adults, but older adults need to keep current too.	

Websites:
www.learnersdictionary.com
www.prowritingaid.com/collocation.aspx
www.dictionary.com
http://www.albertahealthservices.ca/3804.asp

Introduction

Before you read, complete the first two columns of the KWL chart below:

K	W	L
What I **know** about technology designed to support the elderly.	What I **want** to know about technology designed to support the elderly.	What I **learned** about technology designed to support the elderly.

Pre-reading

The excerpt below has been adapted from a news release from
http://www.albertahealthservices.ca/3804.asp

New technologies bring more independence to seniors (February 10, 2011)

EDMONTON - The Government of Alberta is working with seniors to test new technologies aimed at providing increased safety for those who live on their own.

Seniors in the Grande Prairie and Medicine Hat areas are testing 3 new technologies. Alberta Health Services (AHS) Home Care will be using wander management systems, personal emergency response programs that detect falls and alert caregivers, and medication management systems that provide reminders to help home care clients maintain their independence.

All 3 technology partners – Care Link Advantage, MedSignals® and Priority Care Call – provide flexible solutions that allow older adults to create unique approaches that fit their personal needs and circumstances. "Alberta Health Services is expanding continuing care services across Alberta. At the same time, seniors have told us very clearly they prefer to remain in their own homes for as long as possible," said David O'Brien, Alberta Health Services, Vice President, Seniors Health.

Food for thought

1. How many new technologies are being tested?

2. What are the names of the companies that are working together with the Government of Alberta to test these new technologies?

3. Do you think the new technologies will help the elderly become more independent?

4. What role do you think provincial governments should play in financing these new technologies for seniors?

Main Reading

Title: Technical Support

Glossary[1]

1. Autonomy means the state of existing or acting separately from others or independence.
2. Sensor is a machine that detects the presence or occurrence of something.
3. Global Positioning System (GPS) is a radio system that uses signals from satellites to tell you where you are and to give you directions to other places.
4. Dementia is a mental illness that causes someone to be unable to think clearly or to understand what is real and what is not real.
5. Activation means causing something to start working.

As you read the selection, use *context clues* to help you figure out the meaning of the following words that you will come across: *disoriented, smart pill box, email alert, apps / tweets/ blogs*

Reading Strategy Tip: Predicting

What kind of new technologies can help the elderly maintain their independence longer? As you read the heading of each section in the main reading, imagine equipment or some kind of technology that can help address a need. Write down what you predict the new technology can do in the table below.

Area of need	What the new technology
Medication	
Falls and injuries	
Assistance at home	
Safety at home	

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[1] Definitions taken from www.learnersdictionary.com

Technical Support

For many of us, technology is something that moves faster than we do! Apps, tweets, blogs, texts – it can all be a little overwhelming. But technology also holds the promise of supporting greater safety, autonomy and personal choice, especially for those of us who want to stay in our own homes for as long as possible.

New technologies are bringing a range of supports that can help older adults manage personal risks, reduce social isolation and carry out the tasks of everyday living. These technologies can also serve to bring peace of mind to families and caregivers, not to mention reduce demands on the health-care system. Here are just some examples of exciting technological innovations that are available now, or will soon be available, in Alberta.

Did you remember to take your medication?
Most caregivers of older adults will tell you that this question starts or ends most conversation with their loved ones. Communication technology is helping to make this question unnecessary. Phone, email or text technologies can be used to send reminders when it's time to take medication. In turn, smart pill boxes send email alerts to health professionals and caregivers when medication has been taken.

What if I (or you) fall?
Communication technology is being developed and used to prevent falls or reduce their consequences among older adults, especially those who live alone. When a fall occurs, pressure sensitive mats, undergarments with pads and sensors, and wall sensors can send alerts. Two-way voice systems can then make it easy to check in and determine if help is needed.

I just need a little help at home. Most of us want to stay in our own homes as long as possible and technology is helping to make this possible. Stair lifts make it easier for older adults to move around their homes and help to reduce falls. Emerging automation technologies, including automatic ovens activation, can support older adults with their activities of daily living.

Safe at home. For their own safety, people living with dementia are often placed in institutional care before they are ready to go. If they remain in their home, those who care for them are often afraid their loved one will wander outside and become disoriented or lost. Technologies such as global positioning system (GPS) locators and door alerts can help to improve safety and independence for people living with dementia, while giving peace of mind to their caregivers.

Reading Comprehension

1. Why would someone feel overwhelmed by technology?

2. How can the new technologies bring peace of mind to caregivers?

3. How do smart pill boxes work?

4. Why would the question "did you remember to take your medication?" end a conversation?

5. From the list below, highlight the synonym of "autonomy" as it is used in this context.

    a. dependence   b. freedom   c. choice

                                                 d.

6. From the list below, highlight the synonym of "automatic" as it is used in this context.

    a. self-activating   b. smart   c. mechanical

                                                 d.

7. The term "activities of daily living" refers to things that are done for every day self-care. Which of the following are examples of activities of daily living that older adults may need help with? (Check ✓ the appropriate answers)

    _____ Dressing in the morning

    _____ Eating a meal

    _____ Reading a magazine

    ___ Watching TV

    ___ Taking medication

8. List four types of communication technology that is being developed to reduce the impact of falls among older adults.

Vocabulary Development

A. Context Clues

Use context clues from the reading to guess the meaning of the following words:

Disoriented, smart pill box, email alert, apps / tweets/ blogs

B. Definition Matching

The words in italics on the next page are taken from the reading. These words are also found on the *list of the first 2000 most commonly used words of English* and on the *Academic Word List*. Match the words to the correct definition and find the part of speech. The first one has been done for you as an example

Range, isolation, risks, mat, emerge, wander, institutional, consequences, overwhelm, undergarments

	Word	Part of speech	Definition
1.	Isolation	Noun	the state of being in a place or situation that is separate from others
2.			a small piece of material used to cover the floor or ground
3.			to move around or go to different places usually without having a particular purpose or direction
4.			something that happens as a result of a particular action or set of conditions
5.			the possibility that something bad or unpleasant (such as an injury or a loss) will happen
6.			to rise or appear *from* a hidden or unknown place or condition **:** to come out into view
7.			to cause (someone) to have too many things to deal with
8.			of a place where an organization takes care of people for a usually long period of time
9.			a piece of underwear
10.			a group or collection of different things that are usually similar in some way

C. Collocations

Words that are used in a certain way together are called collocations. A collocation is a particular combination of words. Take the word "fire". Collocations of the word "fire" are *truck* and *fighter* – "fire truck" and "fire fighter" for example. Use online reference sites such as www.prowritingaid.com/collocation.aspx or www.thesaurus.com or www.dictionary.com to find the collocations of "smart" and "technology". Complete the collocations table on the next page. The first one has been done for you as an example.

Smart	Technology
Smart pill box	Digital technology

Reading Strategy

Read the predictions you made and compare them to the information in the reading selection. How accurate were your predictions?

Grammar Focus / Pragmatic Competence

Adjective clauses are dependent clauses. They modify nouns and pronouns. They begin with the words such as "*who, whom, which, and that*". Adjective clauses give more information about a noun. An adjective clause joined to an independent clause makes a complex sentence.

Example:

Mary, who does not trust the internet, completed an online banking transaction.

The adjective clause "…who does not trust the internet…" gives us information about Mary.

Adverb time clauses tell us when the action described in the independent clause took place. An adverb time clause begins with words such as *"when, whenever, while, after, since, before, and until"*.

Example:

Society benefits <u>when new technologies improve people's lives</u>.

The adverb clause "… when new technologies improve people's lives" gives us information about the verb.

Activity 1

The sentences below are taken from the reading selection. Underline the adjective clause or time clause in these sentences. Highlight the noun that each adjective clause modifies. Highlight the verb that the adverb time clause modifies. Hint: there are two adverb time clauses. The first one has been done for you as an example.

1.	For many of us, <mark>technology</mark> is something <u>that moves faster than we do</u>.
2.	Technology holds the promise of supporting greater safety, autonomy and personal choice, especially for those of us who want to stay in our own homes for as long as possible.
3.	New technologies are bringing a range of supports that can help older adults manage personal risks.
4.	Here are some examples of exciting technological innovations that are available now in Alberta.
5.	As a result of new technologies, a range of supports that can help older adults carry out the tasks of everyday living are now available.
7.	A range of supports that can help older adults reduce social isolation are evidence of the usefulness of new technologies.
8.	When medication has been taken, smart pill boxes send email alerts to health professionals and caregivers.
9.	Phone, email or text technologies can be used to send reminders when it's time to take medication.
10.	Communication technology is being developed and used to prevent falls among older adults, especially those who live alone.
11.	If they remain in their home, those who care for them are often afraid their loved one will wander outside and become disoriented or lost.

Activity 2

Combine the sentences in each of the following pairs by making one of them an adjective clause and joining it to the other sentence. Use subject pronouns: *who, which, and that*. Put the clause immediately after the noun it modifies. Add commas if necessary. The first one has been done for you as an example.

Remember
- Who is used for people
- Which is used for things
- That is used for people and things

1. Medication optimization technologies are useful tools to caregivers. Caregivers help the elderly track their medication intake.

   Medication optimization technologies are useful tools for caregivers who help the elderly track their medication intake.

2. Single function technologies are part of standalone technologies. Standalone technologies are simple and easy to use.

3. A more recent development is integrated technology. Integrated technology is more complex than single function technology.

4. Remote Patient Monitoring (RPM) technologies are a great resource for some of the elderly. Some of the elderly cannot access health care sites easily.

5. Remote Patient Monitoring (RPM) is a new technology in health care for seniors. Seniors may need help in managing a range of health conditions.

6. New technologies are now available to help manage the health care of the elderly. A number of the elderly want to be independent for as long as possible.

Reading – Writing Link

<u>What I have learned about new technologies designed to help seniors</u>

_____

_____

_____

_____

_____

_____

_____

_____

Link to Essential Skills

Essential skills are the skills needed for work, learning, and life (www.hrsdc.gc.ca). They are enabling skills that help you perform daily tasks as well as tasks required on the job.

Look up the social networking websites for seniors below. Find out the registration process and the cost. Write down a short description of the services that the social networking website offers. What can seniors do on the website?

Website	Registration cost	Description (Services available)
www.genkvetch.com		
www.thirdage.com		
www.growingbolder.com		

Are there any other websites you can find that are designed for seniors?

Answer Keys

Reading Comprehension

1. *Answer may vary* Someone may feel overwhelmed by technology when that person cannot keep up with all the changes.

2. New technologies can bring peace of mind to caregivers because of they help older adults in the activities of daily living and they allow for greater safety.

3. Smart pill boxes work send emails or text messages to caregivers and health professionals when someone takes medication.

4. This question could cause an argument between the caregiver and the person receiving care.

5. From the list below, highlight the synonym of "autonomy" as it is used in this context.

    a. dependence   b. <mark>freedom</mark>   c. choice

6. From the list below, highlight the synonym of "automatic" as it is used in this context.

    a. <mark>Selfactivating</mark>   b. smart   c. mechanical

7. The term "activities of daily living" refers to things that are done for every day self-care. Which of the following are examples of activities of daily living that older adults may need help with? (Check ✓ the appropriate answers)

    __✓__ Dressing in the morning
    __✓__ Eating a meal
    _____ Reading a magazine
    ____ Watching TV
    __✓__ Taking medication

8. Pressure sensitive mats, undergarments with pads and sensors, and wall sensors can send alerts. Two-way voice systems can then make it easy to check in and determine if help is needed.

Vocabulary Development

A. Context Clues

Disoriented is when one is lost and cannot figure out where they are.
Smart pill box is a box where medications stay. This box is technologically advanced because it can send messages.
Email alert is a message or warning sent in an email.
Apps / tweets/ blogs are new technologies that allow for communication.

B. Definition Matching

	Word	Part of speech	Definition
1.	Isolation	Noun	the state of being in a place or situation that is separate from others
2.	Mat	Noun	a small piece of material used to cover the floor or ground
3.	Wander	Verb	to move around or go to different places usually without having a particular purpose or direction
4.	Consequences	Noun	something that happens as a result of a particular action or set of conditions
5.	Risks	Noun	the possibility that something bad or unpleasant (such as an injury or a loss) will happen
6.	Emerge	Verb	to rise or appear *from* a hidden or unknown place or condition **:** to come out into view
7.	Overwhelm	Verb	to cause (someone) to have too many things to deal with
8.	Institutional	Adjective	of a place where an organization takes care of people for a usually long period of time
9.	Undergarments	Noun	a piece of underwear
10.	Range	Noun	a group or collection of different things that are usually similar in some way

C. Collocations * Answers will vary**

Smart	Technology
Smart pill box	Digital technology
Smart phone	Advanced technology
Smart board	Communication technology
Smart classroom	Technology use

Reading Strategy

Answers will vary

Grammar Focus / Pragmatic Competence

1.	For many of us, technology is something that moves faster than we do.
2.	Technology holds the promise of supporting greater safety, autonomy and personal choice, especially for those of us who want to stay in our own homes for as long as possible.
3.	New technologies are bringing a range of supports that can help older adults manage personal risks.
4.	Here are some examples of exciting technological innovations that are available now in Alberta.
5.	As a result of new technologies, a range of supports that can help older adults carry out the tasks of everyday living are now available.
7.	A range of supports that can help older adults reduce social isolation are evidence of the usefulness of new technologies.
8.	When medication has been taken, smart pill boxes send email alerts to health professionals and caregivers.
9.	Phone, email or text technologies can be used to send reminders when it's time to take medication.
10.	Communication technology is being developed and used to prevent falls among older adults, especially those who live alone.
11.	If they remain in their home, those who care for them are often afraid their loved one will wander outside and become disoriented or lost.

Activity 2

1. Medication optimization technologies are useful tools to caregivers. Caregivers help the elderly track their medication intake.

    Medication optimization technologies are useful tools for caregivers who help the elderly track their medication intake.

2. Single function technologies are part of standalone technologies that are simple and easy to use.

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3. A more recent development is integrated technology which is more complex than single function technology.

4. Remote Patient Monitoring (RPM) technologies are a great resource for some of the elderly who cannot access health care sites easily.

5. Remote Patient Monitoring (RPM) is a new technology in health care for seniors who may need help in managing a range of health conditions.

6. New technologies are now available to help manage the health care of the elderly who want to be independent for as long as possible.

Reading –Writing Link

*Paragraphs will vary**

Link to Essential Skills

Website	Registration cost	Description (Services available)
www.genkvetch.com	Free	Social networking for seniors. Health articles, recipes, movie and book reviews are available.
www.thirdage.com	Free	Website for women over the age of 50. There is information on health and wellness, beauty, relationships, and entertainment.
www.growingbolder.com	Free	Social networking site with blogs, online magazine, and shopping capabilities.