

Learning Needs Assessment

Topic: Planning meals for low-income seniors

BACKGROUND

This section explains the background of the project and why a course was requested to be developed. It provides further details of the problem that needs to be addressed through an instructional course, and my research to learn more about the problem.

Problem

The municipality of Glenoak has had to increase funding to local food banks, as they have had a rise of single low-income seniors using the supplies of the food banks. To address this, the city has asked for a 30-minute in-class course for planning healthy meals within a reduced budget for low-income seniors. They would like for this course to provide seniors with the knowledge and skills to plan a nutritious meal on a low-income.

How you researched it: questions you wanted to answer and sources you checked for answers

The majority of the sources of information came from various literature on low-income individuals, as well as recent online articles, and a research journal on food insecurities and low-income seniors. I also researched Canada's most recent food guide and what a healthy meal should look like. For statistical information Statistics Canada was referred to as well as Government of Canada websites. Multiple websites on planning meals, as well as budgeting for food purchases were consulted to get a good sense of what foods were economically viable for low-income seniors and how a wholesome nutritious meal could be implemented out of that.

Questions and concerns that I need to follow up on included:

- Demographic profile of who a single independent low-income senior is.
- What current guidelines are suggested for meals in terms of nutrition?
- What amount of a budget should be allocated toward food purchases?
- The best shopping and planning methods to stretch an individual's money in purchasing food.

A complete list of resources consulted is available at the end of this report.

RESULTS

Restate the request

“As part of an effort to help local food banks reduce the need of low-income seniors utilizing food bank resources on an increased basis, design a 30-minute course to help low-income seniors acquire the knowledge and skill to plan a nutritious meal on a low-income.”

(source: sponsor, the director of municipal funding)

Business need

The business need in this project is to reduce expenses for the municipality of Glenoak, by reducing the amount of municipal funding given to local food banks.

The course will benefit the sponsor in reducing expenses, as after taking the course low-income seniors will be better informed and have the skills to plan a meal while respecting their reduced budget. When a low-income senior is able to plan a healthy meal on a low-income, they will be less likely to turn to the local food banks for supplementing their meals, without compromising on nutrition. In turn the food banks will not need to request additional funding from the municipality of Glenoak as less low-income seniors will turn to them for food, saving the municipality money.

Performance problem

The following sections deal with several areas within performance and demonstrate why a request for a course was made. First, narrative scenarios are provided for the desired performance and current performance. Second, a detailed analysis is provided to compare tasks in the ideal performance and tasks in the current performance, followed by entry tasks learners are assumed to have before starting the course. Finally, the performance gap is addressed to analyze where the discrepancy lies between the ideal performance and current performance.

Tasks in ideal and current performance

Scenarios

Ideal performance scenario:

Elizabeth is a 72-year-old low-income senior who lives in the municipality of Glenoak and has been retired for seven years now. Even on her low-income she prioritizes her meals and tries her best to ensure that they are as nutritious as can be, as she recently took a city course on planning meals for low-income seniors. She used to frequent the local food bank to fill in the gaps of food

she needed but didn't have the budget for. She now understands, especially at her advanced age and with her rising health related issues, she needs to make nutritious food a priority for her own benefit and has the skills and knowledge to do that on her lower income.

Before her weekly grocery shopping trip, she sits down with a notepad and pen as well as the grocery flyers that come in the mail. She scans the pages of the two flyers of the bargain grocery stores she frequents that are close to her apartment complex. She circles the specials of the week and writes out a list of seven days on her notepad from Monday to Sunday. She writes down meals for supper each day, based on what is on sale on the flyers (always trying to find the healthier options that are on special that week) and as well as trying to incorporate more plant-based meals. She also consults her favorite cookbook and tries to select food items that can be used for at least two meals. Before she completes her plan for her dinner meals, she goes through her kitchen pantry, her fridge, and freezer as well to see what food is already in her kitchen so that she doesn't repurchase an item she already has at her disposal. If she does notice a food item that she already has, she makes sure to cross it off her list so that she doesn't repurchase it.

Based on the weekly food specials in the flyers and the inventory of her own kitchen, Elizabeth is able to organize and mark down her seven meals. She makes her grocery list on a separate sheet and groups items by sections at the grocery store (ex: produce, dairy etc.) and labels the prices next to the item (based on the item price in the flyer or estimates the price based on what she has purchased the item for before). She then sums each section of her grocery list to get a subtotal, and then adds the subtotals to get a final total. Elizabeth compares if her grocery list final total is within her food budget. This is to stay organized and to make sure she doesn't go over her food budget.

Since implementing this weekly method of planning her nutritious meals, Elizabeth is staying within her reduced budget, eating healthier, and isn't relying on her local food bank to fill the gaps in her daily meals.

Current Performance Scenario:

Nadia is a 68-year-old low-income senior, who lives in the town of Glenoak. She retired three years ago and has had a difficult time living on her reduced income. In the past six months, she has had to frequent her local food bank on a weekly basis in order for her to have enough food to prepare her meals for dinner during the week.

She does grocery shop at her local premium grocery store as well and tends to buy milk, eggs, strawberries, and sliced cheese. She tends to buy the same thing every week and will pick up other items she notices when she is at the grocery store. Some weeks she will purchase an item that she already has in her kitchen, as she forgot to check her kitchen before she left for the grocery store. Nadia tends to decide around 4 pm every day what meal she wants to eat that

evening and will often be missing an item to prepare that meal, causing her to make a quick trip to the grocery store to pick up that one item.

Although she tries to eat healthy the food bank often has more non-perishable options that aren't as nutritious, requiring her to choose food such as boxed pasta mixes of macaroni and cheese, canned soups and ready-made spaghetti sauce. At times she also picks food that would be considered "junk" food as the food banks shelves can run low on supplies some weeks, and she needs to eat some food even if it is cookies and high sodium crackers.

Nadia's health isn't at its prime, especially with her high cholesterol, and eating nutritious food would be an easy method to stay healthier. Because of her frequent use of the local food bank, and at times their low supplies of healthier options, she isn't able to eat as healthy as she would like to. Due to her lack of planning Nadia is struggling on her lower income, eating less healthy, and the local food bank is seeing her much more often.

Task Lists

The following lists provide two different views of how the learner is performing to achieve the end-result. The first is a tasks list in the ideal performance and the supporting hierarchy of tasks to attain the desired end result. The second list reflects the current performance of how the tasks are accomplished, followed by entry tasks learners are assumed to have already. These lists are followed by a description of the performance gap and where we observe the difference between the ideal and current performance.

Tasks in ideal performance:

End-result:

Reduce food bank reliance by low-income seniors, through planning nutritious meals on a reduced budget.

-
1. Evaluate a meal to determine if it is nutritious.
-
- a. State what nutrition means.
 - i. Define the term nutrition.
 - ii. Describe different elements of nutrition.
 1. Identify the calories.
 2. Identify the sodium.
 3. Identify the potassium.
 4. Identify the carbohydrates.
 5. Identify the sugars.
 6. Identify the protein.

7. Identify the vitamins and minerals.
- b. Select which food groups can be found in a meal.
 - i. Describe the different food groups.
 1. Identify the fruits.
 2. Identify the vegetables.
 3. Identify the dairy.
 4. Identify the proteins.
 5. Identify the fats.
 - ii. Describe a meal
 1. Define breakfast.
 2. Define lunch.
 3. Define supper.
 4. Define a snack.

2. Outline planning a nutritious meal.

- a. Describe what planning entails.
 - i. Define the term plan.
 - ii. Select a planning format
- b. Recognize the characteristics of a nutritious meal according to Canada's food guide (H.Canada, 2018).
 - i. Explain why we should eat more plant-based proteins (H.Canada, 2018).
 1. Define a plant-based protein.
 2. Identify a plant-based protein.
 3. Distinguish health benefits of a plant-based protein from a non plant-based protein.
 - ii. Recognize why water should be the first beverage of choice (H.Canada, 2018).
 1. List ingredients of water compared to a non-water beverage (such as a juice).
 2. Identify benefits of water.
 - iii. Explain the benefits of eating more fruits and vegetables (H. Canada, 2018).
 1. Define what fruits and vegetables are.
 2. Identify why we should eat more fruits and vegetables.
 - iv. Explain the benefits of eating whole grain foods (H. Canada, 2018).
 3. Define what whole grains are.
 4. Identify why we should eat more whole grains.

3. Develop a food budget for two meals.

- a. Define the term budget.
 - i. State the purpose of a budget.
 - ii. Define income.

- iii. Define expenses.
 - 1. Name fixed expenses.
 - 2. Name variable expenses.
- b. Plan a food budget.
 - i. Identify income.
 - ii. Identify how much to allocate to the food category of the budget for two meals (“How Much Money You Should Spend on Living Expenses—2019 Budgeting Guidelines for Income | Credit Counselling Society,” n.d.).

4. Organize planning two meals based on weekly grocery flyers.

- a. Describe what grocery flyers are.
 - i. Describe different types of flyers.
 - 1. Identify grocery flyers.
 - 2. Identify hardware store flyers.
 - 3. Identify pharmacy flyers.
 - 4. Identify department store flyers
 - ii. Describe different types of grocery stores.
 - 1. Identify a bargain grocery store.
 - 2. Identify a premium grocery store.
- b. Identify sales on the weekly grocery flyer.
 - i. Define what a sale is.
 - ii. Circle the current sales on a weekly flyer.
- c. Make a list of two meals around sales.
 - i. Write out a meal for day one.
 - 1. Identify circled food items.
 - 2. Decide if an individual food item should be included in a meal based on its nutritional value and Canada’s food guide (H.Canada, 2018)
 - 3. Consult cookbooks, food websites and magazines for meal ideas (H. Canada, 2018).
 - 4. Identify if the food item can also be used for another meal.
 - ii. Write out a meal for day two.
 - 1. Identify circled food items.
 - 2. Decide if an individual food item should be included in a meal based on its nutritional value and Canada’s food guide (H.Canada, 2018).
 - 3. Consult cookbooks, food websites and magazines for meal ideas (H.Canada, 2018).
 - 4. Identify if the food item can also be used for another meal.

5. Develop a grocery list based on planning two meals.

- a. Describe what a grocery list is.

- i. Define the term grocery list.
- ii. Recognize a format of a grocery list.
 1. Identify produce.
 2. Identify grains.
 3. Identify dairy.
 4. Identify proteins.
 5. Identify frozen foods.
 6. Identify miscellaneous items.
- b. Identify food items needed for planned meals on a list.
 - i. List items needed for the first meal.
 - ii. List items needed for the second meal.
- c. Modify list of food items based on the inventory in your kitchen (“10 Tips for Planning Meals on a Budget—Unlock Food,” 2018).
 - i. Modify list of refrigerated items.
 1. Check the fridge for items on the list for each meal.
 2. Remove items from the list that you already have in the fridge.
 - ii. Modify list of freezer items.
 3. Check the freezer for items on the list for each meal.
 4. Remove items from the list that you already have in the freezer.
 - iii. Modify list of kitchen pantry items.
 5. Check the kitchen pantry for items on the list for each meal.
 6. Remove items from the list that you already have in the kitchen pantry.
- d. Create a grocery list based on the new modified list for two meals.
 - i. Format list into grocery store sections.
 1. Write out produce section.
 2. Write out bread section.
 3. Write out protein section.
 4. Write out dairy section.
 5. Write out freezer section.
 6. Write out grain section.
 7. Write out miscellaneous section.
 - ii. Identify item on meals list.
 - iii. Categorize which section of the grocery store the item can be found in.
 - iv. Write down the item name under the corresponding section name.

6. Evaluate if the food budget was respected after making a grocery list.

- a. Note the price of the food item on the grocery list.
 - i. Identify price on flyer.
 - ii. Identify price based on passed shopping or previous purchase of similar item.
 - iii. Write down the price of each grocery item.

- b. Calculate the price of all items on the grocery list
 - i. Sum the price of items in each section of the grocery list.
 - ii. Sum the total of all sections of the grocery list.
 - iii. Identify a total sum for grocery items on the list.
- c. Assess if the total sum of the grocery list fall within the food budget allocation.

Tasks in current performance:

End-result: Acquire food for meals through resources at the food bank and grocery shopping.

1. Decide what to eat for a meal.
 - i. Select meal based on desired food to be consumed.
 - ii. Identify if food is available in the kitchen.
2. Go to grocery store to purchase food.
 - i. Go to the closest grocery store.
 - ii. Purchase food items.
 - iii. Purchase other food items as noticed at grocery store.
3. Fill gaps in food purchases.
 - i. Visit local food bank.
 - ii. Select food to fill food gaps.

Assumed entry tasks:

The following list skills and knowledge that are assumed learners already have before starting the course:

- To be able to cook basic meals.
- Be able to read a food label.
- Distinguish between different meals eaten during the day.
- Define fixed expenses and variable expenses.
- Identify cookbooks, food websites and magazines for meal idea.
- Be able to plan several meals out of a single food item.
- Define food item prices and have a general knowledge of how much food items cost based on past shopping experiences.
- Be able to do basic mathematical calculations (such as basic addition and subtraction).
- Be able to use a calculator.
- Be able to compare number values.
- Identify different sections of the grocery store.
- Identify different areas in a kitchen (fridge and freezer area, pantry area).

Gap between current and ideal performance

Many low-income seniors live with food insecurities and rely on local food banks to fill the gaps in the food they need to consume. Single independent seniors are often the prime group who are affected (Green-LaPierre et al., 2012). A change in their financial situation as they are aging and life circumstances often leave them in a situation where there is not enough within their financial disposal to purchase the necessary food.

Coupled with food insecurities, many seniors never before needed to plan or budget for their meals before being considered low-income and have additional health issues which are affected by their food consumption as well. Many may lack skills in organization, planning and budgeting and end up spending more than they have to on food or do not have the financial means to purchase food and end up using the local food banks more often.

Further details on the performance gap**Desired end-result:**

Reduce food bank reliance by low-income seniors, through planning nutritious meals on a reduced budget.

Foundational Concepts:

- To reduce food bank reliance by seniors, they must have the knowledge and skills to manage their lower-income and budget accordingly for food. Their food budget should generally be between 10% and 20% of gross income. (“How Much Money You Should Spend on Living Expenses—2019 Budgeting Guidelines for Income | Credit Counselling Society,” n.d.).
- To plan healthy meals within their reduced food budget, they must have the skills and knowledge to organize how to plan meals and build a grocery list accordingly.

Basic processes for performing tasks:

- Evaluate a meal to determine if it is nutritious.
- Outline planning a nutritious meal.
- Develop a food budget for two meals.
- Organize planning two meals based on weekly grocery flyers.
- Develop a grocery list based on planning two meals.
- Evaluate if the food budget was respected after making a grocery list.

Alternate processes:

- To further stretch their food budget, they may be able to price-match (where a retailer will match the sale price for the same item from a competing store) at participating grocery stores and benefit from sales at other stores. For this course, and to keep concepts manageable, we will not introduce it at this time. Maybe at another date we can provide another course on how to price-match at the grocery store.
- Other ways to save money is having the knowledge and skill to compare the price value within similar food items (example: different cuts of meats have different price points, or generic brands of foods vs. name brands of foods). This could also be added as an extension to this course at a later date.

Common issues:

- Having difficulty calculating income; as income may come from various sources when retired.
- Being able to distinguish a true sale price from just a simple price list of an item.
- Not knowing the common price range of a food item.
- Ability to select a variety of meals that include multiple markers of value (price, nutritional value etc.).

Learners

This section provides a general profile of the average low-income senior, and statistical information which helps provide some background information on who the learners are (including demographics, their previous knowledge, and what factors might influence them). The information is followed by three narrative profiles of the different types of learners who might attend the course.

General profile:**➤ *Demographics:***

- Age: Seniors are generally considered anyone 65 years of age or older (E. and S. D. Canada, 2016).
- Gender: Their tends to be a higher number of low-income seniors who are female, then male (Green-LaPierre et al., 2012).
- Housing: “74 percent of seniors that visit food banks are rental or social housing tenants”(Banks, 2018, para.3)
- Health: “Individuals aged 65 and older were more likely to have one or more chronic health conditions such as hypertension (53%), arthritis

(43%) and back problems (29%) than those aged 45 to 64 (24%, 20% and 25%, respectively).” (“Seniors,” 2018, para.11)

- Income: To be considered low-income in Canada (which you must be in order to receive additional benefits such as the Guaranteed Income Supplement as a senior) your maximum annual income cannot exceed \$18,600 as a single individual (E. and S. D. Canada, 2015).
- The course is aimed at independent retired single seniors, as research has suggested that single seniors have statistically been shown to be a vulnerable group when it comes to food insecurities (Green-LaPierre et al., 2012).

➤ ***Previous knowledge:***

- From a lifetime of cooking and deciding on meals, depending if they were the primary cook or the individual who grocery shopped before attaining the age of being considered a senior.
- They might have very little knowledge as they were not accustomed to being the one who took responsibility for grocery shopping or cooking.
- Lack of personal financial management knowledge.
- Lack of awareness of their own food insecurities (Green-LaPierre et al., 2012).
- View utilizing a food bank as being resourceful (Green-LaPierre et al., 2012).

➤ ***Influences:***

- Family.
- Friends.
- Television, magazines with food product advertisements (“Marketing can influence your food choices – Canada’s Food Guide,” 2019).
- Amount of concern for one’s health in relation to food consumption and nutrition.
- Transportation: most do not own a vehicle, and either rely on family and friends for mobility or public transportation to access food (Green-LaPierre et al., 2012).
- Degree of concern for living within their low-income.
- Generational lens; having lived in more difficult financial situations in the past they don’t perceive their current financial situation to be problematic (Green-LaPierre et al., 2012).

Personas

The following personas provide a narrative description and additional insight into who three different types of learners are.

High-maintenance Learner:

Frederick is a 71-year-old citizen of Glenoak. He has lived here his whole life and retired from his job as an insurance claims broker about 10 years ago. Although Frederick made a decent income while he was working, he did not do enough financial planning for his retirement and therefore would be considered low-income as he has a very small monthly take-home income. Frederick is extremely frugal and only spends money on necessities most months, as his monthly income is small, and he understands that his dollars must stretch far. He revises his budget every month, including what he spends on groceries, but in the past six months he has been visiting the local food bank on a weekly basis and often goes over budget. He is extremely concerned for his health, as he is diabetic, and wants to better understand how he can control his blood-sugar levels through his food consumption. At his recent doctor's appointment, he noticed a poster for an upcoming course organized by the municipality of Glenoak to help low-income seniors plan meals. He has signed up for the course as he wants to understand how he can live within his lower-income and still eat healthy. He is planning on bringing his most recent grocery list and has a list of questions he wants to ask the instructor so that he can understand where he needs help. He is eager to learn more about how he can take control of this portion of his budget, focus on his health and rely less on his local food bank.

Middle-of-the-road learner:

Delilah is a 69-year-old senior, whose husband just recently passed away less than six months ago. She was previously employed at the local fabric store but retired close to four years ago. It has been a difficult transition since her husband's passing as he was the primary breadwinner and was the one who organized the couple's finances. She has slowly taken over but as a low-income senior she finds it difficult at times to organize her food budget for her meals. She volunteers at her local food bank once a week and has also had to use its food resources for herself more frequently. She has high blood pressure but has it controlled with medication, therefore she does not see how what she eats could affect her health. Her friend at the food bank suggested she attend an upcoming course with her offered by the city of Glenoak on planning meals for low-income seniors. Delilah is planning on attending the course and is willing to hear what information and tools the course can provide her with.

Low-maintenance learner:

Janet is a 65-year-old low-income senior who just moved to Glenoak one year ago. She relocated to the city as her previous apartment was getting too expensive on her income and her children encouraged her to move closer to them, as there was more subsidized housing available here. Before her husband's death four years ago, he was the one who did the cooking and the weekly grocery shopping as Janet usually worked during supper hours as her children were growing up. When she goes grocery shopping she tends to buy whatever she feels she needs in the moment. She will often come back home and realize she doesn't have several items or purchased something that she already has. She is short on basic food every week and relies heavily on the food bank near her home for essentials. Janet just feels that this is the way things are when you are a senior and feels that she has lived through even more dire financial times than her current situation. Despite being a senior her health is in good condition and she has no major health issues that need attention. Her children have suggested that she take a local course offered by the city on planning meals for low-income seniors. To please her children, she agrees to attend but doesn't feel like she has many questions to ask as she feels like she is making the best out of her situation and just accepts this as her reality.

Constraints in the learning environment

The following section deals with constraints that may affect learning, and its application in the work environment. Factors that may affect both areas (learning and the work environment) in the course are discussed and how that may hinder and influence the level of progression of the learner.

➤ Issues affecting learning:

- Advanced age of learner: Since most seniors are much older their cognitive functions are not as sharp as they once were. Even actions such as basic calculations might be difficult for some individuals. Utilizing a calculator may be difficult for some as well, and cause frustration.
- Emotional issues: a sense of shame or failure in needing to rely on the food bank. On the opposite end, a sense of indifference or even acceptance that their current situation is acceptable (Green-LaPierre et al., 2012) .
- Attitudes to change: the degree to which they acknowledge their new financial reality of being a low-income individual.
- Anxiety of attending a course and trying to keep up when the instructor is explaining content.
- Outside influences: Advice from family or friends which contradict information provided during the course.
- Classroom: level of accessibility for those with reduced mobility (wheelchairs, walkers etc.).

- Issues affecting the application of the learning in the work environment:
 - Learners might be overwhelmed by the amount of information presented during the course. They might forget key details and how it can be applied to their own situation.
 - Mobility: ability and energy to get to a grocery store that offers lower prices (bargain grocery vs. premium grocery store).

Constraints on the project

Product constraints

This section focuses on the details of the product content and what should be included in the design and technical details.

- ***Editorial guidelines:***
 - A 30-minute in class course.
 - Style guide: Any food products mentioned, must not be mentioned by brand but by type (ex: rice type cereal instead of “Rice Krispies”).
 - Dictionary:
 - *Low-income*: a single individual whose annual income falls below the Government of Canada’s current figure of \$18,600 (Canada, 2015).
 - *Food-insecurities*: “...the inadequate or insecure access to food due to financial constraints.” (“Household Food Insecurity in Canada – PROOF,” 2018, para.1).
- ***Design guidelines:***
 - Use city of Glenoak municipal logo on all slide pages (bottom right hand corner). First slide must be municipality of Glenoak standard introduction slide.
 - As this course is targeted towards seniors who may have visual impairments, font choice must be Times New Roman and preferably with a larger font size.
 - Slide must not be too overcrowded, again to keep a simplistic and easy to read format for the intended audience.
 - Colours must be kept within the Glenoak municipal colour theme (blue, white and green).
- ***Technical guidelines:*** Presentation graphics program such as PowerPoint (any slide software application is acceptable).
- ***Templates:*** Only applicable to the first slide in presentation.

Project constraints

- ***Must-meet deadline:*** December 10, 2019.
- ***Not-to-exceed budget:*** nil (0\$).
- ***Must-include staff:*** instructional designer.

REQUIREMENTS

This section of the needs assessment focuses on translating the needs into concrete objectives which are observable and measurable goals. Evaluations are done to see if the objectives were met and to assess learning.

Objectives

The following objectives focus on the business objective and where the municipality of Glenoak would benefit. It also touches upon the content objective, in what learners of the course should be able to do after attending the course.

Business objective

To reduce the municipal funding to food bank by 30% over the next year, by providing low income seniors the skills and knowledge on how to plan meals and grocery shop to stay within their budget. When seniors stay within their food budgets, they are less likely to use the food banks and in turn the food banks requesting less municipal funding.

Content objectives

Learners should be able to be able to plan meals and grocery shop accordingly, while staying within their food budget. They should be able to perform all related tasks at an acceptable level of 100% and without assistance (unless otherwise indicated).

End-result:

Reduce food bank reliance by low-income seniors, through planning nutritious meals on a reduced budget.

1. Given an example of a meal, evaluate it to determine if it is nutritious.

- a. State what nutrition means.
 - i. Define the term nutrition.
 - ii. Describe different elements of nutrition when presented with a food label.
 - 1. Identify the calories.
 - 2. Identify the sodium.

3. Identify the potassium.
4. Identify the carbohydrates.
5. Identify the sugars.
6. Identify the protein.
7. Identify the vitamins and minerals.
- b. Given an example, select which food groups can be found in a meal.
 - i. Describe the different food groups.
 1. Identify the fruits.
 2. Identify the vegetables.
 3. Identify the dairy.
 4. Identify the proteins.
 5. Identify the fats.
 - ii. Describe a meal
 1. Define breakfast.
 2. Define lunch.
 3. Define supper.
 4. Define a snack.

2. Outline planning a nutritious meal.

- a. Describe what planning entails
 - i. Define the term plan.
 - ii. Select a planning format.
- b. Recognize the characteristics of a nutritious meal according to Canada's food guide (H. Canada, 2018).
 - i. Explain why we should eat more plant-based proteins (H. Canada, 2018).
 1. Define a plant-based protein
 2. Identify a plant-based protein.
 3. Distinguish health benefits of a plant-based protein from a non plant-based protein.
 - ii. Recognize why water should be the first beverage of choice (H. Canada, 2018).
 1. List ingredients of water compared to a non-water beverage (such as a juice).
 2. Identify benefits of water.
 - iii. Explain the benefits of eating more fruits and vegetables (H. Canada, 2018).
 1. Define what fruits and vegetables are.
 2. Identify why we should eat more fruits and vegetables.
 - iv. Explain the benefits of eating whole grain foods (H. Canada, 2018).
 1. Define what whole grains are.
 2. Identify why we should eat more whole grains.

3. Develop a food budget for two meals with the aid of a calculator.

- a. Define the term budget.
 - i. State the purpose of a budget.
 - ii. Define income.
 - iii. Define expenses.
 - 1. Given a list of expenses, name fixed expenses.
 - 2. Given a list of expenses, name variable expenses.
- b. Plan a food budget.
 - i. Identify income.
 - ii. Given a percentage, identify how much to allocate to the food category of the budget for two meals (“How Much Money You Should Spend on Living Expenses—2019 Budgeting Guidelines for Income | Credit Counselling Society,” n.d.).

4. Given weekly grocery flyers, organize planning two meals.

- a. Describe what grocery flyers are.
 - i. Describe different types of flyers.
 - 1. Identify grocery flyers.
 - 2. Identify hardware store flyers.
 - 3. Identify pharmacy flyers.
 - 4. Identify department store flyers
 - ii. Describe different types of grocery stores.
 - 1. Identify a bargain grocery store.
 - 2. Identify a premium grocery store.
- b. Identify sales on the weekly grocery flyer.
 - i. Define what a sale is.
 - ii. Given a grocery flyer, circle the current sales on a weekly flyer.
- c. Make a list of two meals around sales.
 - i. Write out a meal for day one.
 - 1. Identify circled food items.
 - 2. Decide if an individual food item should be included in a meal based on its nutritional value and Canada’s food guide (H. Canada, 2018)
 - 3. Consult cookbooks, food websites and magazines for meal ideas (H. Canada, 2018).
 - 4. Identify if the food item can also be used for another meal.
 - ii. Write out a meal for day two.
 - 1. Identify circled food items.
 - 2. Decide if an individual food item should be included in a meal based on its nutritional value and Canada’s food guide (H. Canada, 2018).

3. Consult cookbooks, food websites and magazines for meal ideas (H. Canada, 2018).
4. Identify if the food item can also be used for another meal.

5. Develop a grocery list based on planning two meals.

- a. Describe what a grocery list is.
 - i. Define the term grocery list.
 - ii. Recognize a format of a grocery list.
 1. Identify produce.
 2. Identify grains.
 3. Identify dairy.
 4. Identify proteins.
 5. Identify frozen foods.
 6. Identify miscellaneous items.
- b. Identify food items needed for planned meals on a list.
 - i. List items needed for the first meal.
 - ii. List items needed for the second meal.
- c. Modify list of food items based on the inventory in your kitchen (“10 Tips for Planning Meals on a Budget—Unlock Food,” , 2018).
 - i. Modify list of refrigerated items.
 1. Check the fridge for items on the list for each meal.
 2. Remove items from the list that you already have in the fridge.
 - ii. Modify list of freezer items.
 3. Check the freezer for items on the list for each meal.
 4. Remove items from the list that you already have in the freezer.
 - iii. Modify list of kitchen pantry items.
 5. Check the kitchen pantry for items on the list for each meal.
 6. Remove items from the list that you already have in the kitchen pantry.
- d. Create a grocery list based on new modified list for two meals.
 - i. Format list into grocery store sections.
 1. Write out produce section.
 2. Write out bread section.
 3. Write out protein section.
 4. Write out dairy section.
 5. Write out freezer section.
 6. Write out grain section.
 7. Write out miscellaneous section.
 - ii. Identify item on meals list.
 - iii. Categorize which section of the grocery store the item can be found in.
 - iv. Write down the item name under the corresponding section name.

-
6. Evaluate if the food budget was respected after making a grocery list.
-
- a. Note the price of the food item on the grocery list.
 - i. Given a grocery flyer, identify the price on the flyer.
 - ii. Identify price based on passed shopping or previous purchase of similar item.
 - iii. Write down the price of each grocery item.
 - b. Calculate the price of all items on the grocery list
 - i. Sum the price of items in each section of the grocery list.
 - ii. Sum the total of all sections of the grocery list.
 - iii. Identify a total sum for grocery items on the list.
 - c. Given a food budget, assess if the total sum of the grocery list fall within the food budget allocation.

Prerequisite Objectives

Learners should already have mastered the following skills before starting the course:

- To be able to cook basic meals.
- Be able to read a food label.
- Distinguish between different meals eaten during the day.
- Define fixed expenses and variable expenses.
- Identify cookbooks, food websites and magazines for meal idea.
- Be able to plan several meals out of a single food item.
- Define food item prices and have a general knowledge of how much food items cost based on past shopping experiences.
- Be able to do basic mathematical calculations (such as basic addition and subtraction).
- Be able to use a calculator.
- Be able to compare number values.
- Identify different sections of the grocery store.
- Identify different areas in a kitchen (fridge and freezer area, pantry area).

Evaluation

The following Level 1 assessment evaluates participants satisfaction with the course (see figure 1). Level 2 assessment evaluates how well learners have acquired the skills taught in the course.

Level 1 evaluation:

1 - In one word, how would you describe the course on planning meals for low-income seniors?

2 - How would you rate the course planning meals for low-income seniors?

1	2	3	4	5
Unsatisfactory		Average		Excellent

3 - How well could you plan meals within your lower income before taking this course?

1	2	3	4	5
Not at all		Somewhat		Very well

4 - How well can you now plan meals on a lower income after taking this course?

1	2	3	4	5
Not at all		Somewhat		Very well

5 - How likely are you to use the skills taught in planning meals on a lower income?

1	2	3	4	5
Not often		Somewhat		Very often

6 - The best part of the course was:

7 - The one thing which could improve the course is:

Figure 1. Level 1 evaluation. Adapted from *Training Design BASICS*, (p. 72), by S. Carliner, 2015, Alexandria, VA: ATD Press. Copyright 2015 by ATD Press.

Level 2 evaluation:

Main Objective 1 - Given an example of meal, evaluate it to determine if it is nutritious.

Question 1)

Carla has just picked up a quick hamburger and french fries from her local fast food restaurant, is this a nutritious meal?

- A. True
- B. False

Feedback:

- A. True. Not correct. Usually, most items from fast-food restaurants tend to be high in sodium, high in fat and very calorie-heavy with little nutritional value.
- B. False. Correct. This is not the best choice for a nutritious meal.

Question 2)

Sebastian is trying a new recipe this evening for supper, a sweet potato chickpea stew (“Moroccan stew (Harira)—Canada.ca,” 2019).

Which one of the following statements is correct?

- A. It is not high in nutritional value as it has a sweet potato in the meal. Potatoes are considered a carbohydrate, and carbohydrates are generally not that healthy.
- B. It is a great plant-based meal. The chickpeas provide fiber and protein, and the sweet potatoes are high in vitamin A (“White Potatoes vs. Sweet Potatoes,” 2018).
- C. Not the best choice as sweet potatoes are high in sugar.

Feedback:

- A. It is not high in nutritional value as it has a sweet potato in the meal. Potatoes are considered a carbohydrate, and carbohydrates are generally not that healthy. Not correct. Although potatoes are higher in carbohydrates, sweet potatoes are slightly lower and contain a very high dose of vitamin A (“White Potatoes vs. Sweet Potatoes,” 2018)
- B. It is a great plant-based meal. The chickpeas provide fibre and protein, and the sweet potatoes are high in vitamin A (“White Potatoes vs. Sweet Potatoes,” 2018). Correct. This meal would be considered a nutritious option because of the nature of the ingredients.
- C. Not the best choice as sweet potatoes are high in sugar. Not correct. Although slightly higher in sugar than a regular potato, it’s high nutritional value generally makes it a healthier choice.

Question 3)

Sarah needs to decide between two meal options this evening. The first is a burrito bowl, made with refried beans and white rice. It is topped with cheese, sour cream, and salsa. The second meal is a grilled chicken breast over whole grain couscous, it has a dressing made with greek yogurt and grilled vegetables. Which meal should Sarah choose?

- A. The first meal: a burrito bowl made with refried beans and white rice. It is topped with cheese, sour cream, and salsa.
- B. The second meal: grilled chicken breast over whole grain couscous, with a dressing made with greek yogurt and grilled vegetables.

Feedback:

- A. The first meal: a burrito bowl, made with refried beans and white rice. It is topped with cheese, sour cream, and salsa. Not correct. Although it is a vegetarian meal which would make it seem like the healthier option, refried beans have a lot of fat. Cheese and sour cream are also items which tend to be high in fat.
- B. The second meal: grilled chicken breast over whole grain couscous, it has a dressing made with greek yogurt and grilled vegetables. Correct. The method of grilling adds flavour, and uses less fat than other methods (“Healthy cooking methods – Canada’s

Food Guide,” 2019). Greek yogurt is a high protein alternative to sour cream (“Greek yogurt – healthy or hype? - MSU Extension,” n.d.) .

Main Objective 2 - Outline planning a nutritious meal.

Question 1)

Janet has to plan a dinner for her diabetic friend. Which of the following should she do first?

- A. Just start cooking with what she has at home, her friend can pick out things she feels will affect her blood sugar levels.
- B. Plan to take her out! Janet is too nervous to cook for her friend; she doesn't want to compromise her health.
- C. Research a diabetic friendly cookbook from the library and pick one meal she feels she can attempt.

Feedback:

- A. Just start cooking with what she has at home, her friend can pick out things she feels will affect her blood sugar levels. Not correct. Picking out food will not make the meal more diabetic friendly.
- B. Plan to take her out! Janet is too nervous to cook for her friend; she doesn't want to compromise her health. Not correct. It is often better and a more nutritious option to cook at home.
- C. Research a diabetic friendly cookbook from the library and pick one meal she feels she can attempt. Correct. Specific dietary cookbooks can offer great ideas for healthy meals.

Question 2)

Adam has to plan a meal for himself. In a short sentence write out his dinner plans for this evening, including his beverage.

Feedback:

A correct answer will be any meal that includes elements from Canada’s food guide, namely a high portion of fruits or vegetables, whole grains, protein and the beverage of choice being water (Canada, 2018).

Question 3)

Janelle has been planning meals since she was a young mother. She always plans her meals based on what is on sale even if it is white pasta and canned tomato soup. Is Janell's approach to planning nutritious meals the best?

- A. True. She is planning and saving money!
- B. False. Although she is planning, the items she chooses on sale are not the most nutritious.

Feedback:

- A. True. She is planning and saving money! Not correct. She is planning and buying on sale, but the items are not nutritious.
- B. False. Although she is planning, the items she chooses on sale are not the most nutritious. Correct. She is not planning nutritious meals as the items she purchases are processed (the canned tomato soup) and the pasta is not a whole grain (Canada, 2018) .

Main Objective 3 - Develop a food budget for two meals with the aid of a calculator.

Question 1)

Stacey is considered a low-income senior and has 375\$ in her account during a given week, what percentage of her income should be allocated to food for one week?

- A. 20%
- B. 45%
- C. 5%

Feedback:

- A. 20%. Correct. This is the maximum amount an individual should allocate to food purchases ("How Much Money You Should Spend on Living Expenses—2019 Budgeting Guidelines for Income | Credit Counselling Society," n.d.) .
- B. 45%. Not correct. This is not a correct amount; it is over the recommended amount.
- C. 5% Not correct. This is amount is too little.

Question 2)

Laila needs to plan two meals for the following days. Her current weekly income is 300\$. Calculate below how much she should be generally spending on each meal.

Meal #1: _____

Meal #2: _____

Feedback:

Correct answers could fall within the range of 10% to 20% (“How Much Money You Should Spend on Living Expenses—2019 Budgeting Guidelines for Income | Credit Counselling Society,” n.d.) of 300\$, and be divided further into two meals.

For example, 10% of 300\$ is equal to 30\$. The response could then be divided into seven days (a week) which is approximately 4.30\$ per day. Further divided into three meals per day which would break down into approximately 1.43\$ a meal. This would give you a general amount, which should be allocated towards the two meals.

Question 3)

Karen has an income of 1450\$ dollars every month. List three possible fixed expenses she may have and how much they might be. How much is leftover for variable expenses per month, and for food per week? How can this be further broken down into a price for two meals?

Three possible fixed expenses and their amount:

1. _____
2. _____
3. _____

Amount left for variable expenses per month: _____

Amount allocated to food for one week: _____

Price allocated toward two meals: _____

Feedback:

A correct answer will list three fixed expenses and calculate the variable expenses. The variable expenses should be further broken down, allocating at a maximum of 20% to the food budget for the week, but could fall in the range between 10% and 20% (“How Much Money You Should Spend on Living Expenses—2019 Budgeting Guidelines for Income | Credit Counselling Society,” n.d.). This amount can then be further divided into a general cost per meal. The response should look similar to the following:

Fixed expenses: rent 450\$, energy bill 65\$, rental insurance 12\$.

Leftover for variable expenses: 923\$ per month.



Food budget allocation: 46.15\$ per week.

Food budget for two meals: approximately 2.20 per meal. Two meals would have a budget of 4.40\$.

Main Objective 4 - Given weekly grocery flyers, organize planning two meals.

Question 1)

Given the following grocery flyer (see figure 2), plan two meals for breakfast. The budget is set at 7.40\$ for two meals (it is assumed that you already have other breakfast items to help make a meal, such as milk, already in your kitchen):

Super Shop Express
Weekly sales from October 3, 2019 to October 10, 2019.
 Sales this week! 

Large eggs 1.88\$/dozen	Peanut butter 2\$
Crunch supreme cereal 3.50\$	Oatmeal 1.50\$
Whole grain bread 2\$ per loaf	Chicken legs pkg of 4 for 3\$
Chickpea can 0.70\$/each	Waffles 2.45\$
Apples 0.99\$/ pound	Chocolate syrup 2.50\$

Figure 2. Grocery Flyer

Breakfast Day 1: _____

Breakfast Day 2: _____

Total cost of two meals: _____

Feedback:

A correct answer will respect the budget and utilizes the sales within the specific flyer (taking into account the healthier options).

Example:

Breakfast Day 1: Oatmeal with a boiled egg on the side.

Breakfast Day 2: Peanut butter on whole grain bread.

Total cost of two meals: 7.38\$

Question 2)

Sandra has decided to make slow cooked chicken with glazed carrots for one day and chickpea soup (making chicken stock from leftover bones from the first meal) for the following day's meal. Would these two meals be a good choice according to the sales on flyer (see figure 2)?



Super Shop Express	
Weekly sales from October 3, 2019 to October 10, 2019.	
 Sales this week! 	
Large eggs 1.88\$/dozen	Peanut butter 2\$
Crunch supreme cereal 3.50\$	Oatmeal 1.50\$
Whole grain bread 2\$ per loaf	Chicken legs pkg of 4 for 3\$
Chickpea can 0.70\$/each	Waffles 2.45\$
Apples 0.99\$/ pound	Chocolate syrup 2.50\$

Figure 2. Grocery flyer.

- A. True.
- B. False.



Feedback:

- A. True. Correct. Both meals utilize the current weekly sales of the grocery stores to plan nutritious meals.
- B. False. Not Correct. Sandra has utilized the grocery sales and planned meals accordingly.

Question 3)

Select three items from the following weekly grocery store flyer (see figure 2), where at least one item can be used for both meals (assume you have the other necessary ingredients at home already). Decide on two nutritious meals for lunch while staying within a budget of 7.40\$ for both meals.

Super Shop Express
 Weekly sales from October 3, 2019 to October 10, 2019.

 Sales this week! 

Large eggs 1.88\$/dozen	Peanut butter 2\$
Crunch supreme cereal 3.50\$	Oatmeal 1.50\$
Whole grain bread 2\$ per loaf	Chicken legs pkg of 4 for 3\$
Chickpea can 0.70\$/each	Waffles 2.45\$
Apples 0.99\$/ pound	Chocolate syrup 2.50\$

Figure 2. Grocery flyer.

Three items: 1- _____
 2- _____
 3- _____

Lunch meal 1: _____
 Lunch meal 2: _____

Feedback:

A correct response will include the following:

- Any three nutritious items from the flyer, where one item can be used over two meals, is correct.
- The total price of items must fall within the given budget.

Main objective 5 - Develop a grocery list based on planning two meals.

Questions 1)

Here is a plan for two meals, develop a list of all the grains you will need to purchase.

Monday: Whole wheat spaghetti with marinara sauce, grilled tilapia.

Tuesday: Moroccan eggplants with couscous and lentil pilaf.

Grains: _____

Feedback:

A correct answer will include the grains:

- whole wheat spaghetti.
- Couscous.

Question 2)

Corina needs to make the following two meals:

- 1) Chicken thighs in a mushroom sauce over brown rice, roasted broccoli on the side.
- 2) Indian dhal (a lentil-based stew) with whole wheat naan and a side salad with tomatoes, cucumbers and a mint yogurt dressing.

Create a grocery list for the meals listed above, by grocery section.

Feedback:

A correct answer will list the following sections with the food items for the meals in the proper sections.

- produce section: mushrooms, broccoli, lettuce, tomatoes, cucumbers, mint.
- bread section: whole wheat naan.
- protein section: chicken thighs.
- dairy section: yogurt.
- freezer section: n/a.
- grain section: brown rice.
- miscellaneous section: a can of lentil.

Question 3)

You are about to go to the grocery store for your weekly grocery shopping trip. Look at the following grocery list and develop two meals. Don't forget to take into account items you already have at home with the list on the right side and to cross them off on your grocery list as you do not need to purchase them.

Grocery list	Items in your kitchen (fridge, freezer, pantry)
<ul style="list-style-type: none"> - Eggs - Chicken legs - Tomatoes 	<ul style="list-style-type: none"> - Tomatoes - Cheese - Barley

<ul style="list-style-type: none"> - Spinach - Cheese - Carrots - Whole wheat bread - Vegetable stock - Broccoli - Can of lentils - Barley - Romaine lettuce 	<ul style="list-style-type: none"> - Romaine lettuce
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Meal #1: _____

Meal #2: _____

Feedback:

A correct response could look something like the following. As long as a duplicate item is crossed off on the grocery list and utilized for a meal.

Example Meal #1: Tomato Spanish frittata and salad.

Example Meal #2: Carrot, lentil and barley soup and grilled cheese.

Main Objective 6 - Evaluate if the food budget was respected after making a grocery list.

Question 1)

Zosia has a budget of 70\$ a week for food. She is going grocery shopping today. Is she staying within her budget according to the following prices of the items on her grocery list?

<p><u>Protein</u>: Eggs 3\$, Tilapia 12\$, Chicken legs 6\$.</p> <p><u>Produce</u>: Bananas 2\$, Cauliflower 2\$.</p> <p><u>Grain</u>: Tortilla chips 3\$, bread 3\$.</p> <p><u>Dairy</u>: Milk 4\$</p> <p><u>Frozen</u>: n/a</p> <p><u>Miscellaneous</u>: Lemon pepper spice 4\$, Salsa 3\$.</p>

Answer: _____

Feedback:

Yes, Zosia is staying within her budget. Correct. Zosia stayed within her budget as her total on her bill added up to 42\$.

No, Zosia did not stay within her budget. Not correct. A calculation error might have occurred while adding the food item prices. Recalculate to obtain a correct amount.

Question 2)

Christopher has spent 80\$ on food this week grocery shopping. His food budget is 70\$ per week. Provide one suggestion on how he could stay within his budget next time.

One suggestion to stay within his budget: _____

Feedback:

A correct answer would include one strategy to grocery shop within the budget (stick to flyer sales, check the kitchen before going to the grocery store etc.)

Question 3)

Laila has been spending 90\$ a week on food, going over budget every week. Given her last receipt, where could she be overspending?

Receipt

Milk 2% 5\$
Milk 1% 4\$
Cheese 6\$
Premium butter 7\$
Apples 2.50\$
Onions 1.50\$
Cabbage 2.50\$
Crackers 2\$
Frozen lasagna 12\$

Feedback:

A correct answer should point out that she is purchasing close to 10\$ in milk, a pricey premium butter, and a frozen lasagna which is premade and therefore generally more expensive than making it yourself. All these factors are most probably pushing her weekly spending beyond her food budget.

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