

Teaching, Learning, Assessment And Evaluation

The Learning Environment

The learning environment must respond to and respect a variety of learners' needs and abilities and be conducive to the incorporation of a range of strategies that encourage and support learning. Such an environment

- accommodates diversity in students' backgrounds, learning styles, personal assets and abilities
- fosters the involvement of students in meaningful learning activities
- supports the effective use of a wide range of resources, including technology and the media
- allows for active, interactive and collaborative learning
- is respectful of and fosters respect for divergent views, values and beliefs
- supports research and inquiry, evidence-based decision making, and planning and evaluation
- encourages and fosters learner responsibility and accountability for demonstrating stated learning outcomes

The classroom environment is critical to personal and social skill building. An atmosphere that recognizes and supports individual differences, that enhances self-esteem and that encourages differing opinions will encourage students to share and participate in learning activities. An open, supportive environment fosters a sense of security, belonging, respect, caring, worth and efficacy. Teachers should concentrate on establishing an atmosphere which invites student interaction, is respectful of the feelings, ideas and opinions of others and can be described as caring, collaborative and supportive. A way to facilitate this is to use activities which allow students to get to know each other, are non-threatening and enjoyable.

Role of the Teacher

Consideration needs to be given to the setup and organization of the physical space to foster individual and small group work, engage in some activities anonymously, display ongoing projects and finished work, accommodate learning centers and encourage creativity.

The teacher plays a critical role in structuring and managing an effective and efficient learning environment. The primary role of the teacher is to guide and facilitate learning and to assist students with the acquisition of the skills and abilities required to demonstrate outcomes. In contributing to the learning process, the teacher can

- assist students in the attainment of skills and abilities that enable them to take responsibility for and make reasoned decisions about food as it relates to health
- provide direction and encouragement to students as they engage in individual and collaborative learning activities
- act as a mentor and as a resource person as students make decisions about their own learning and the kinds of activities that will assist them in that process
- recognize and plan for diversity in students' backgrounds, learning styles, personal assets and abilities
- gauge students' awareness of issues related to nutrition and assist them to build on this awareness
- help students establish and negotiate codes of conduct regarding individual and group behaviours that promote learning
- help students set limits and establish parameters for individual, class and lab behaviour
- provide opportunities to integrate knowledge, skills, attitudes and behaviours related to nutrition and health and to life-long learning
- record and report on student progress

Role of the Student

The student plays a critical role in contributing to an effective and efficient learning environment and to the achievement of learning outcomes. The primary role of the student is to take responsibility for learning and to demonstrate achievement of curriculum outcomes. Students can

- strive to acquire skills and abilities that enable them to take responsibility for and make reasoned decisions
- build on knowledge and awareness of issues related to personal and family nutrition
- engage in learning activities that support personal learning styles and incorporate personal assets and abilities
- respect and contribute to a learning environment that supports diverse values, beliefs and opinions
- engage in individual and collaborative learning activities aimed at achieving course outcomes
- work with others to establish and employ codes of conduct regarding individual and group behaviours that promote learning
- respect the set limits and established parameters for individual and class, and lab behaviour
- engage in opportunities to integrate knowledge, skills, attitudes and behaviours related to personal and family nutrition
- take responsibility for directing their own learning, completing tasks and monitoring progress
- evaluate their progress and develop new strategies and plans for continuous learning and improvement

Note: High school should be viewed and promoted as a critical step in preparing for a career. Nutrition 2102 and 3102 introduces students to a variety of career opportunities related to food, nutrition and wellness. This exposure to career exploration will aid students in their personal career planning.

Key Concepts, Skills, and Abilities

This curriculum guide has been developed around a set of key concepts, skills and abilities. It focuses on concepts that are central to easing and facilitating the transition from early adolescence to adulthood and thereby becoming autonomous with regard to personal health and wellness. The curriculum is intended to assist young people to assess their current skills and abilities, and build on those that contribute to and support healthy food choices.

Learning Skills

Communication, Critical Thinking, Problem Solving and Decision Making

Generic learning skills such as the communication skills of listening, speaking, reading and writing are critical to success in this course and in life. Thinking skills such as accessing and applying knowledge, problem solving and evaluating are key to addressing the decisions that are made every day.

Students will be engaged in the assessment, promotion and enhancement of their personal development. This requires critical reasoning regarding food issues that impact their lives. An integral part of a learning process intended to lead to behavioural change is the ability to solve problems and to generate reasonable approaches and strategies in addressing challenging situations or circumstances. The result should be evidence-based decision making and its application to personal growth and development.

Goal Setting, Planning and Organization

A discussion of goal setting helps students realize the importance of setting goals that are realistic and attainable. Goals, the articulation of dreams, are most effectively met with planning and organization. This involves applying skills related to the management of resources including time and finances, personal attributes and capabilities, and social supports. Creating plans and time lines for the acquisition of goals keeps them in view and more likely to be achieved. Students will be encouraged throughout the course to assess, re-assess and modify plans on a regular basis.

Research

There are various sources of information that students can access such as school resource centres, internet or world wide web, professionals, media (newspapers, television, magazines, etc.), friends, family and community members, including groups and

organizations. Methods of gathering information can include in-depth reviews of personal and family issues identified by students; class, school, community interviews carried out by students on specific issues or a range of issues; self-administered questionnaires and surveys and literature searches.

Lifelong Learning

This course is intended to help students acquire skills and abilities that, when applied throughout their lifetime, contribute to their ability to effectively engage in lifelong learning. Regular personal reflection and creation of plans, periodically reviewed, promote continuous personal development and learning. The outcomes under GCO3 are intended to promote and lead to lifelong learning.

Personal Management Skills

This broad category encompasses those skills that contribute to the effective management of ones' personal health and help define the personal role to be played as the global community strives toward a food secure system. Decision making and goal setting are also linked to these skills. This curriculum promotes the acquisition and use of personal and social skills in the learning environment and ultimately throughout life. Social competence is necessary in successful interpersonal relationships at home, in the community and at work.

Specific personal-management skills highlighted in this course include

Positive Attitudes and Behaviours

These are exemplified by self-esteem and confidence; honesty, integrity and personal ethics; positive attitude towards learning, growth and personal development; and initiative, energy and persistence to complete tasks.

Responsibility

This is demonstrated by the ability to set goals and priorities; plan and manage time, money, and other resources to achieve goals and be accountable to self, school, family and community for actions taken.

Leadership and Teamwork Skills**Adaptability**

This skill is evident in a positive attitude towards change, the recognition of and the respect for diversity and individual differences, and the ability to identify and suggest new ideas to address challenges creatively and effectively.

The skill of working with others is evident in the ability to understand and contribute to group goals, understand and work with the culture of the group, plan and make decisions with others and support the outcomes of those decisions, respect the thoughts and opinions of others in the group, exercise “give and take” to achieve group results, seek a team approach where appropriate, lead when appropriate and mobilize the group for high performance.

(Source: *Conference Board of Canada*)

Career Development

Learning skills, personal management and resource management skills, and leadership and teamwork skills form the basis for career development. Career exploration and career development learning activities are infused into the components of the curriculum guide. Students are provided with opportunities to assess personal knowledge, skills and attitudes; gain new understandings and abilities and consider these in relation to specific careers and career planning.

Gender Equity

Gender equality and gender equity are often used interchangeably but they are not the same. Equality refers to the equality of rights and entitlements whereas equity refers to ensuring the fairness of outcomes. Gender equity is a principle of applying a fair approach, not necessarily the same approach, to females and males. It addresses identified societal imbalances by redressing practices that create barriers to equal participation of males and females. For example, because equal opportunity may not lead to equitable results, sports activities have weight classes and divisions. These are used as a means to level the playing field and arrive at fair outcomes. In an effort to achieve fair outcomes, it is critical to look at and analyze situations from a gender perspective. Gender analysis is a process that considers the differences between women’s and men’s lives including roles, responsibilities, current status and access to resources and how these aspects influence outcomes. This process helps increase awareness and understanding, identify problems and lead to conscious informed decisions resulting in gender equity.

The Teaching and Learning Process and Suggested Strategies

Instruction and learning approaches should focus on empowerment, not the transfer of information; on the development of skills, not on learning about skills. Learning activities should fully engage the learner and place responsibility on the learner to demonstrate personal progress. Students should

- acquire and demonstrate capability and efficacy
- practise and acquire skill sets
- take responsibility for personal improvement

In this curriculum, students will start from where they are and, through activities, develop and demonstrate a range of understandings, capabilities, attitudes and behaviours.

A. Knowledge and Understanding

It is expected that students will

1. assess what they know and how they feel about the issue or topic being examined
2. research the issue or topic and get the facts

Suggested Strategies: anonymous questions; bulletin boards; simulations; classroom displays; engaging community groups, organizations and professionals; researching newspapers, magazines, television and the internet; analyzing films and videos; using diagrams and charts; field trips; individual and small group presentations; demonstrations; games; lectures; group and panel discussions; product and service analysis; surveys and inventories; rating scales and cooperative small group learning.

B. Skills and Abilities

It is expected that students will

3. engage in learning activities that take them beyond the facts and that allow them to experience and analyze an issue for personal relevancy
4. determine their skills and abilities
5. determine what resources and skills they need to acquire

Suggested Strategies: personal assets inventory and assessment, collages, models, product and service analysis, drawings, skits, role plays, drama, videotaping, creative writing, brainstorming, group and panel discussions, debates, cooperative small group learning, role modeling, behavioural rehearsal (practising an anticipated response), peer coaching and support, simulations, demonstrations, food laboratory work, personal journals, surveys and inventories, case studies, worksheets, checklists.

C. Attitudes and Behaviours

Students will be encouraged to

6. based on information, attitudes, skills, needs, wants, goals and values, assess personal strengths and limitations and make plans to avail of opportunities and meet challenges

Suggested Strategies: journals, personal analysis and reflection, case studies, personal contracts, peer coaching and support, rating scales, time lines and action plans.

Key Points About Some Strategies

Brainstorming Session

- a process of rapidly generating ideas or responses
- encourages participation because all contributions are accepted without judgement or comment (this includes nods of agreement) and without editing the words of the contributor (this includes “you mean to say.....,” or “this is the same as....”)
- draws on group’s knowledge and experience
- one idea can spark and generate other ideas
- a means of extending boundaries and encouraging creative ideas
- a means of quickly getting a wide range of ideas on a topic or issue
- can be used as a precursor to refining or categorizing ideas/ responses
- is intended to capitalize on the varied experiences, knowledge and ideas of the group
- can be playful with impromptu ideas encouraged and accepted

Cautions:

- participants may have difficulty getting away from known reality
- if not facilitated well, criticism and evaluation of ideas may occur
- should be limited to 5-10 minutes

Case Studies

- are short descriptions of events or circumstances in the lives of hypothetical people
- can be spontaneously created from actual experiences
- provide a context for real-life situations in which individuals and families may find themselves
- allow students to discuss difficult situations which they, or others they know personally, encounter without facing the risk of disclosure
- provide a means of presenting positions and values and is a means of hearing and listening to the positions and values of others
- are a means of presenting alternatives, making decisions and evaluating choices

Cooperative Small Group Learning

- an approach to organizing classroom activity so that students can work with each other and build on one another's strengths and ideas
- group members share clearly defined roles and are interdependent in achieving the main goal
- students learn the importance of respecting individual views and maintaining group harmony
- students must be working towards a common goal
- success at achieving the goal depends on the individual learning of all group members
- the teacher's role is primarily that of facilitator in guiding students as social groups and learning teams as they engage in activities such as identifying problems, generating solutions and practising skills
- successful use of this method is assisted with professional development and practise

Interviews and Surveys

- involve individuals, pairs or small groups in collecting information from peers, younger students, older students and adults
- involve focused thought and active thinking to develop questions and explore ideas
- require interpersonal and listening skills as the student must listen respectfully, react to and interpret the views and experiences of others
- use language to articulate and clarify one's thoughts, feelings and ideas
- allow exchanges of ideas, increased understanding and new awareness of previous knowledge
- promote the development of organizational skills related to the collection and representation of data
- involve follow-up such as reporting and interpretation of data

Projects

- include assigned tasks that provide an opportunity for learners to consolidate/synthesize learning from a number of disciplines or experiences
- usually involve learners, alone or in small groups, working on a task for an extended time period (the actual time frame may depend to some degree on the ages of the learners involved), usually to produce a tangible product such as a model, a demonstration, a report or a presentation
- may be used to relate knowledge to their own experiences and/or to the broader community
- may involve research
- usually involve extending/enriching/reinforcing learning
- should be focused (e.g., subject matter concept, interdisciplinary theme, action projects)
- should include clearly defined task descriptions such as interview, compare opinions, make a model, find contrasting views on, create a dramatic presentation

- should include criteria for planning and evaluation
- students should clearly understand the requirements of the project
- should include clear time lines and ongoing progress reports

Problem Solving

- application of knowledge, skills, ideas, resources and processes to generate one or many solutions to a problem
- may follow the scientific method
- can be a practical skill
- may include strategies such as “trial and error”, brainstorming, “what if/ I suppose”, attribute listing, forced relationships, idea check list and imaging

Inquiry

- elements of inquiry include thinking, reflecting, developing relevant questions and planning appropriate strategies for generating answers and explanations
- allows students to experience and acquire processes through which they can gather information about the world in a variety of ways from a variety of sources
- allows for a high level of interaction among the learner, teacher, the area of study, available resources and the learning environment
- allows students to act upon their curiosity and interests
- encourages students to formulate questions and analyze situations/problems/information
- calls upon prior learning
- encourages hypothesis development and testing (new questions and hypotheses often emerge as the inquiry continues)
- allows students to make inferences and propose solutions
- leads students to realize that there is often more than one answer to a question and more than one approach to a challenge

Learning Centres

- allow students to work independently as individuals or in small groups
- encourage independent as well as collaborative work
- allow for effective use of single or limited copies of resources
- require detailed planning with clear directions
- can accommodate a variety of learning styles
- can be used where students are required to master material as background information or skills

(See Appendix A for “Guidelines for Designing and Managing Learning Centres”.)

Thought Webs

- demonstrate multiple connections of topics and issues to one another
- provide opportunities for students to think about health and make connections
- are a means of categorizing and grouping concepts and ideas

Class Discussion

- allows for full and open sharing of ideas and opinions
- has the potential to engage all learners at the same time
- encourages critical thinking
- provides an opportunity to practise listening skills and oral communication

Labs/Demonstrations

- reinforce concepts covered in class
- allow students to participate in the planning of food to be prepared on lab day and have a meaningful role to play in the lab group
- allow students to adopt an independent role and demonstrate appropriate behaviour in lab environment

Personal or Self-reflection/Journaling

- allows individuals to think about their level of knowledge, their beliefs and values
- facilitates personal goal setting and planning
- supports privacy
- respects the personal quality and uniqueness of the individual
- allows students to reflect on what they have learned or are about to learn
- allows students to pose questions and react to learning experiences

Implementation

There are many factors that need to be considered regarding the planning and delivery of a course at the school and classroom level. The following are suggestions for the implementation of *Nutrition 2102 and 3102*

Time Allocations

Each course is designed to be offered in 55 instructional hours. The percentage and hourly breakdown is:

Nutrition 2102

Food Choices and Nutrition Needs: 20 hours, 36%

Food Selection, Preparation and Storage: 20 hours, 36%

Menu and Meal Planning: 15 hours, 28%

Nutrition 3102

Food, Nutrition and Health: 25 hours, 46%

Food Technology and Production: 15 hours, 27%

Food Security: 15 hours, 27%

The division of time allotments for each component is to be used as a guideline for planning and should be adjusted based on factors such as learner needs and abilities, interests of students, availability of resources, and school and community context and culture. Primary attention should be given to the achievement and demonstration of attitudes, skills and abilities as stated in the outcomes for the course.

Getting Started

Nutrition 2102

Unit One, *Food Choices and Nutritional Needs*, provides a comprehensive study of the nutrients, their food sources, function within the body and their effect on health. It stresses the importance of food, rather than supplements, as a source of nutrients. An additional study of the philosophy of Canada's Food Guide set against a backdrop of striving for health and wellness at every stage of the lifecycle provides students with a strong foundation to critically analyze food intake and its effect on health. In this unit, the teacher may decide to engage students in two of the eight lab experiences. For example, in an effort to increase fruit and vegetable consumption, a lab focusing on fruit and vegetable dishes may be planned to coincide with the outcome "demonstrate an understanding of the Guidelines for Healthy Eating."

Unit Two, *Food Selection, Preparation and Storage* follows logically from Unit One with the culmination of knowledge and skills in Unit Three, *Menu and Meal Planning*.

Over the course of the three units, students should have completed eight lab experiences. The teacher should refer to Appendix G for specific guidelines.

Nutrition 3102

While Nutrition 2102 is not a prerequisite for 3102, it is recommended that, as a minimum, students coming into 3102 having not taken 2102 should be directed to complete a personal study of the nutrients. This will provide the learner with a basic foundation. For the benefit of the students who have completed Nutrition 2102, unit one should be completed first. Because the outcomes in unit two and three are not sequential, the order of completion is left to the teacher. As in Nutrition 2102, eight labs are dispersed into the units according to the guidelines in Appendix G.

When introducing the course, students could be asked to generate a list of their expectations: what they expect to learn and do. This will help establish participatory, interactive student involvement and the incorporation of everyone's ideas.

When choosing activities and strategies to further student learning, it is important to recognize diversity in student learning styles and abilities; cultural, religious and family background and economic status; belief system and values and to consider sensitivities related to these.

Ground Rules

Setting and maintaining ground rules will allow sharing, exploring and learning in an accepting, safe environment. It is important that class members consider and establish ground rules before any discussion of sensitive issues or participation in lab activities. These ground rules need to be reinforced consistently throughout the course(s) and assimilated into all learning activities. With ground rules, students will know what to expect of the teacher, of themselves and of each other. Ground rules usually include

- no put-downs
- no personal questions
- no question is stupid or silly
- the right to pass
- listening to and hearing others' comments and opinions
- confidentiality
- emphasizing safety of person and food preparation practices
- speaking for yourself and others speaking for themselves
- absolute adherence to all safety standards and procedures during lab activities

The teacher and students should be involved in reinforcing ground rules and in reviewing and revising them as needed.

Handling Sensitive Issues

This course requires a supportive, non-judgmental classroom climate because of issues of a personal nature that may arise. In establishing such a climate, the element of trust is critical. One of the ways to build trust is to maintain confidentiality. The teacher should discuss the issue of privacy and confidentiality with the class early in the year. Such a climate will help prevent some students from withdrawing into passivity or from expressing defensiveness in inappropriate ways. The confidentiality of students must be protected and no student or teacher should be placed in a position of feeling pressured to give an opinion or express a viewpoint.

Students should be aware that if they divulge information related to physical and/or sexual abuse, the teacher has a legal responsibility to report it in accordance with the Act Respecting Child, Youth and Family Services. (See Appendix G: An Act Respecting Child, Youth and Family Services.)

Teachers should talk to the class about the kinds of behaviour that is expected in class as well as how to respond to emotions and feelings that some discussions might invoke. Teachers could

1. Remind the class that non-violent behaviour is the expected practice and that an effort will be made to practise non-violence. The class should talk about not agreeing and how to do this. Discuss the practice of ‘making fun’, verbally or otherwise, and why this is not acceptable in class or out of class.
2. Acknowledge that there will be things talked about in class that might make some students uncomfortable. If a discussion is painful, it is OK to “shut down”, to not participate, to take care of oneself in this manner.
3. Discuss the fact that some people handle uncomfortable situations by making jokes or by laughing. Therefore, it would be a good idea to set some ground rules. For example, students could be invited to take a few minutes to talk about how *they* feel about others’ remarks or reactions. Encourage students to say “I feel” or “I felt...” not “you made me feel” or “you degrade me”. Students should be encouraged to speak from an “I” perspective, not a “you” perspective. Ask students if it is OK to accept laughter and what other rules they would like to make.
4. Talk to students about the difference between safety and comfort. It is OK to be uncomfortable knowing there is support of the group. It is important to set personal boundaries. Ask students to articulate these boundaries. Remind them that pushing beyond the comfort level allows for personal growth. It is necessary to take risks and that people will generally take risks to learn and develop if they feel it is safe to do so. Following this discussion of setting boundaries, check with students to see if there is anything they would like to add.
5. Set up a safe place or make arrangements with a person for students to go to when the need arises.

Assessment and Evaluation

In the context of this curriculum guide, assessment is defined as the act of determining progress and measuring achievement while evaluation refers to making interpretations and judgements about student progress and achievement.

Assessment and evaluation are intended to determine performance in relation to the stated outcomes for the course. The stated outcomes provide the framework for teacher and student planning with respect to learning and are the basis for judging student progress and achievement. The stated outcomes for *Nutrition 2102/3102* are the basis, the starting point, for creating assessments strategies. Outcomes should be clearly communicated to students. Student self-evaluation and peer evaluation can be better accomplished when intended outcomes, the GCOs, are known and understood.

Guiding Principles for Assessment and Evaluation

- Assessment and evaluation processes and techniques should be designed to determine whether the outcomes have been achieved.
- Assessment and evaluation should reflect the stated outcomes for the course.
- Assessment and evaluation should be an integral part of the teaching and learning process and of each component of the course.
- Assessment and evaluation should give all students the opportunity to demonstrate the achievement of outcomes.
- Assessment and evaluation should provide positive, instructive and supportive feedback to students.
- Assessment and evaluation should invite and encourage student self-assessment and active participation.
- Assessment and evaluation should allow for a range of options to accommodate students' abilities to demonstrate the achievement of outcomes.

In the *Components* section of this curriculum guide there are specific suggestions for teaching and learning as well as suggestions for assessment. Many of these suggestions can be interchanged and used either as learning activities or assessment activities or both.

Identifying the Activity

To check for full acquisition, opportunities for students to practise and illustrate skills through such activities as role plays, individual or small group work, demonstrations and case studies.

In planning for assessment the key question is “What is the student expected to accomplish?” The answer to this question enables the teacher to choose or design appropriate means that allow the student to demonstrate this. The student will be expected to demonstrate knowledge, skills and abilities. The means can be multiple and varied: presentations; producing videos; writing essays or plays; charting or graphing information; locating and displaying information; demonstrating a skill; designing a product or a plan; drawing or graphing a concept, a process or an idea. The choice of means will depend on available resources including time and the type of learners and their strengths.

Setting the Criteria

At the outset, students need to know what is expected, what they must do and to what degree they must do it, what they must produce in order to demonstrate that knowledge has been gained and skills learned. The criteria must be specific and clear. Providing an example of the caliber of work assists students in preparing for assessment.