Middle Years Human Ecology

Manitoba Curriculum Framework of Outcomes

2018

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Available in alternate formats upon request.

Contents

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Technology Education: Human Ecology

Technology education provides students with opportunities for solving problems, designing, performing essential life skills, constructing products, and addressing current trends and issues. Students use and study technology to create practical solutions to problems—individually or in groups—to develop technical skills, knowledge, and attitudes.

Technology education enables students to explore their ideas, gain practical experiences, and work through thinking processes in a safe and supportive environment. The ability to adapt to a changing technological society and to accept social responsibility is paramount to all Manitobans in the pursuit of new careers and lifestyles. Technology education allows learners to evaluate their strengths and interests in career choices. It also reflects rapid changes in the workplace and allows students to make informed decisions about their future.

Technology education includes the courses found in the subject area of human ecology.

Human Ecology

With this renewal comes a new subject name: human ecology. The change in this new curriculum is significant, so a name change is a natural progression.

The name change reflects the evolving educational landscape while preserving the original home economics perspectives. This is illustrated in the new human ecology logo, which depicts the sprouting of stems and the unfurling of leaves.

Rationale

Human ecology courses provide an interdisciplinary approach that integrates social and physical science theory and action through the study of everyday living. It contributes to empowering individuals to become active and informed members of society who are able to live independently, within thriving families and in dynamic communities.

Human ecology education provides students with essential knowledge and transferable skills that are applicable to their personal lives and success in learning, life, and work.

Mission

The goal of **human ecology** is for students to

- discover knowledge that enhances everyday living
- explore and apply experiential learning
- integrate the principles of preventative, proactive, and practical approaches to support individuals in their personal lives, families, and communities

Vision

Human ecology education strives to

- enhance personal well-being
- develop and apply technical, communicative, and thinking skills
- cultivate skills to participate in a dynamic society

Engaging Students through Life/Work Experiential Learning

Middle Years programming that is experiential and makes connections to students' current and future lives promotes student engagement in learning. Manitoba defines Middle Years programming as the education provided for young adolescents in Grades 5, 6, 7, and 8.

The most crucial decisions in Middle Years education relate to meeting the intellectual, physical, social, emotional, spiritual, and ethical needs of young adolescents and to reflecting the characteristics of these young people who are experiencing rapid change during this stage of development.

Characteristics of Middle Years Students

Young adolescence is an important developmental stage when students are very interested in exploring who they are and in learning more about themselves. During the Middle Years, young adolescents

- search for greater autonomy and independence
- experience the onset of puberty and physical and sexual maturation
- are interested in learning about and developing their interests, learning styles, strengths, abilities, and talents
- prefer active learning over passive learning
- develop their own personal/social values
- are influenced by media, popular culture, and adult values

- seek personal validation through relationships with peers and adults
- need to see the relevance of what they are learning and apply their personal abilities and interests

The Ideal Learning Climate

The learning climate in a Middle Years classroom is a major factor in increasing student engagement and achievement. Learning experiences that best engage Middle Years students

- enable students to feel safe, included, and challenged
- honour the diversity of learners
- encourage active student involvement, both physical and cognitive
- show direct, relevant connections to life outside the classroom
- offer students opportunities to engage in work that involves real-world issues
- offer students opportunities to make authentic contributions to their classroom, school, and the larger community, thereby allowing them to experience the impact of their work
- depict a sense of fairness and equity

Middle Years Human Ecology: Manitoba Curriculum Framework of Outcomes, 2018 is intended to provide a guide for curriculum implementation. The emphasis is on practical applications and instructional purposes. The learning outcomes in each area of study and their sequence can vary based on the activities within the course.

The framework consists of the following:

- Course titles/descriptions
- Course grade levels
- Time allocation
- Curriculum organization
- Cross-curricular learning outcomes
- Safety-related learning outcomes
- Teacher and administrator safety implications

Course Titles/Descriptions

This curriculum replaces the former curriculum, *Middle Years Human Ecology: Manitoba Curriculum Framework of Outcomes* (2015).

Clothing and Textiles

Clothing and textiles courses creates awareness of the role that clothing and textiles play in our daily lives. The learning outcomes develop skills, knowledge, and understanding as students participate in learning activities that allow them to express themselves through designing, producing, and evaluating finished textile projects.

Food and Nutrition

The food and nutrition area of study teaches about healthy relationships with food through theoretical and practical food experiences. A study of food and nutrition can expose students to accurate information and provide opportunities for them to gain competence in making informed choices. The learning outcomes develop skills, knowledge, and understanding of basic food preparation and nutrition.

Course Grade Levels

Each grade requires that students develop their conceptual knowledge base and skill set. Some learning outcomes will be similar for all four levels; in other situations, each level will build on previous knowledge and progress from simple to more complex conceptual understandings.

Middle Years Exploratory/Introductory		**Middle Years Intermediate**	
Grade 5	Grade 6	Grade 7	Grade 8

The four levels provide an opportunity for each school to determine the implementation level that best works for their educational setting. This curriculum attempts to meet the needs of all learners in Manitoba, no matter where on the grade continuum they may belong (e.g., some divisions offer human ecology starting in Grades 5/6 while others offer it starting in Grades 7/8).

Time Allocation

Time allotment tables describe the expectations for the subject area time allotments in the English Program. An overall percentage breakdown is given only as a guideline and reflects a change from the total time in minutes for compulsory and optional subject areas. For more information, see www.edu.gov.mb.ca/k12/cur/timeallotments.html.

Curriculum Organization

Curriculum Goals

Curriculum goals outline the major curriculum components in addition to the general or across-the-curriculum learning goals for the subject area.

Learning Outcomes

Learning outcomes are statements that indicate what students will know or be able to do by the end of the course or as a result of a learning activity. Learning outcomes are usually expressed as knowledge, skills, or understanding. Learning outcomes should be student-focused and clearly outline knowledge, skills, or understanding being assessed. Within each subject area, each course contains general and specific learning outcomes that address a particular area of study related to a subject area.

In developing learning outcomes, the assumption was made that courses are taught by experts in their field; therefore, the terminology and language used in the curriculum is specific to the area of expertise.

General Learning Outcomes

General learning outcomes (GLOs) are overarching statements about what students are expected to learn in each course. They identify broad categories of knowledge, skills, and understandings that students are expected to learn and to be able to demonstrate in a subject area or course.

All general learning outcomes are identified with two numbers, indicating the subject area goal and the general learning outcome. For example, GLO 1.1 is the first general learning outcome under Goal 1.

Specific Learning Outcomes

Specific learning outcomes (SLOs) are statements that identify the specific knowledge, skills, and understandings that students are required to attain by the end of a given course. Some learning outcomes will be revisited several times during a course to allow for connections to be made to other outcomes in the course.

SLOs do not specify the learning activities in which students will participate in order to attain them. In most courses, the emphasis is on applied learning activities. Teachers are advised to select learning activities best suited to teach the SLOs, based on a variety of factors including access to resources or regional needs. In light of rapid changes in technology, teachers are encouraged to update their learning activities in order to meet the needs of students.

SLOs are not necessarily sequential. In other words, they might be taught in an order different from how they appear in the document.

All specific learning outcomes are identified with a sequence of numbers separated by dots. These characters code the general learning outcome and specific learning outcomes. For example, SLO 1.1.1 is the first specific learning outcome under GLO 1.1.

Cross-Curricular Outcomes

Human ecology outcomes are interdisciplinary by their very nature and provide unique and alternate opportunities that can support and enhance concepts and processes in other disciplines. Linking the human ecology content to other content areas supports its relevancy by ensuring meaningful connections can be made between knowledge in curricula to real-life applications (as identified in Appendix 1).

Safety-Related Learning Outcomes

Schools need to offer human ecology activities that are educationally rewarding and relevant to both students' lives and possible future careers in a safe environment. These desired goals can only be achieved through team effort involving all of those who set and administer school policies, design and maintain the learning environment, plan and deliver human ecology lessons, and select and prepare the materials used.

Human ecology teachers must reinforce safety as a priority to students. The specific learning outcomes related to safety are expressed explicitly in each course, but safety should be integrated throughout all courses and reinforced continually. Because of the importance of safety training, development team members have concluded that, with a few exceptions, teachers need to teach and assess safety in every course in their subject area. Therefore, all safety-related SLOs are repeated in both subject areas.

The goal of the *Safety in Middle Years Human Ecology* section (Appendix 2) is to bring together information needed by principals, planners, teachers, and support staff to help them make sound decisions regarding safety. The document identifies areas for decision making and action at a variety of levels. It supports planning and action by providing information on safety legislation and standards, safety hazards, and examples of procedures for eliminating or minimizing hazards.

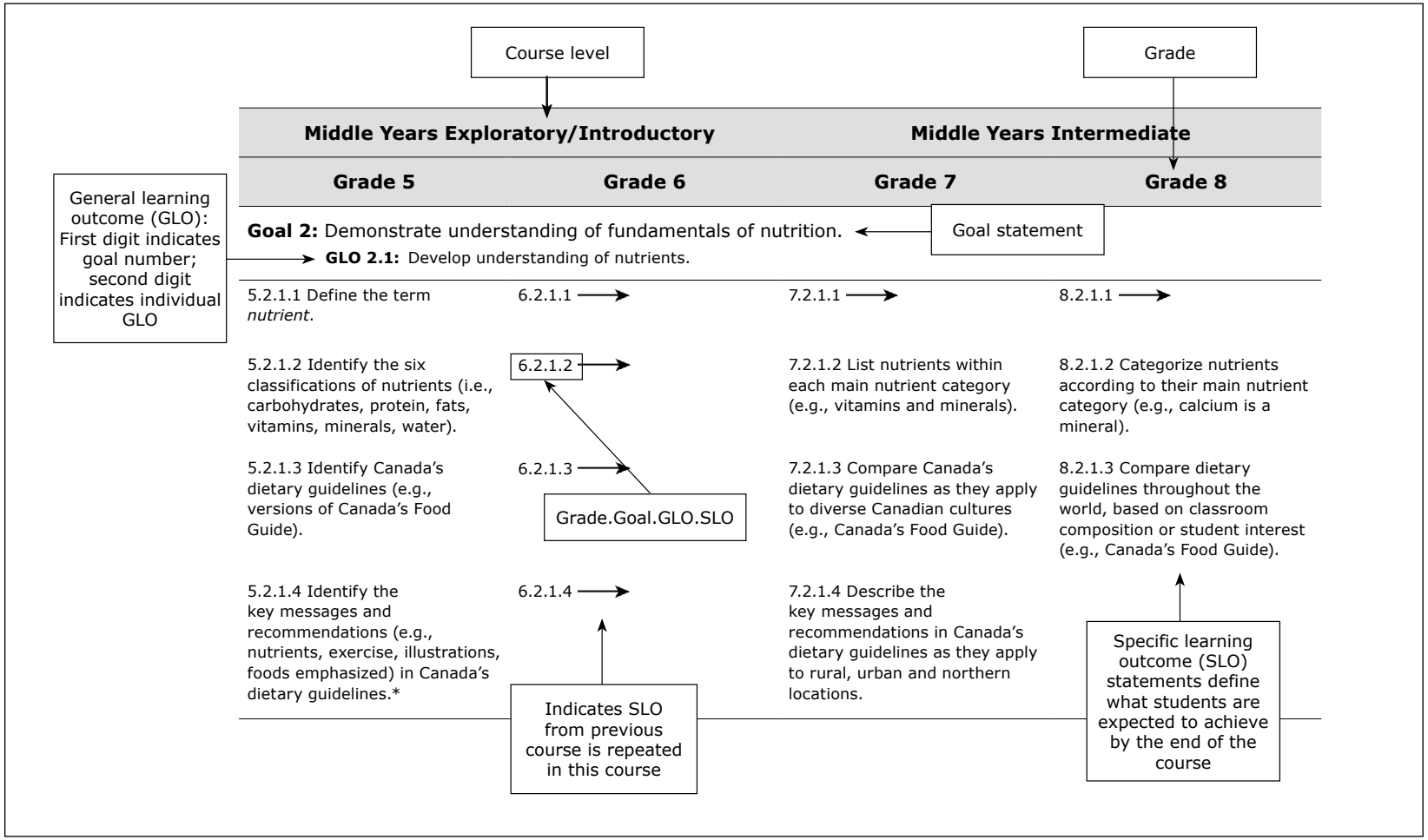
Teacher and Administrator Safety Implications

Principals and classroom teachers must be aware of accident/injury liability and negligence statements found in *The Public Schools Act*, as well as in the Manitoba Education and Training *Administrative Handbook: School Administration – Negligence and Liability* (available on the department website at www.edu.gov.mb.ca/k12/docs/policy/admin/school_admin.pdf).

Below is segment N1 from the *Administrative Handbook* (January 2010), which includes a three-page section of reference on negligence and liability.

> If students are to be placed in situations where the potential for injury exists, appropriate skills training and safety briefings must take place, and safety regulations must be conscientiously enforced. In addition, school officials are legally obligated to see that any facilities and equipment used are in a safe condition. Particular caution should be exercised with regard to physical education equipment, playground equipment, vocational/industrial shops, etc.

Guide to Reading Middle Years Human Ecology Goals and Learning Outcomes



Curriculum Implementation Dates

Middle Years Human Ecology: Manitoba Curriculum Framework of Outcomes, 2018 is intended to provide a guide for curriculum implementation. This revised human ecology curriculum replaces the former curriculum: *Middle Years Human Ecology: Manitoba Curriculum Framework of Outcomes* (2015). During voluntary implementation (fall 2018), teachers have the option of teaching the new Senior Years curriculum or using the previous curriculum. Under system-wide implementation (fall 2019), all human ecology teachers in Manitoba will teach the new curriculum.

Learning Resources

Teams of teacher-evaluators nominated from Manitoba schools examine publishers' submissions, evaluate learning resources, and make recommendations regarding the suitability of resources for Manitoba classrooms. The Middle Years Human Ecology learning resource shortlists or bibliographies are available at www.edu.gov.mb.ca/k12/learnres/index.html#educators.

Middle Years
Clothing and Textiles

Manitoba Curriculum
Framework of Outcomes

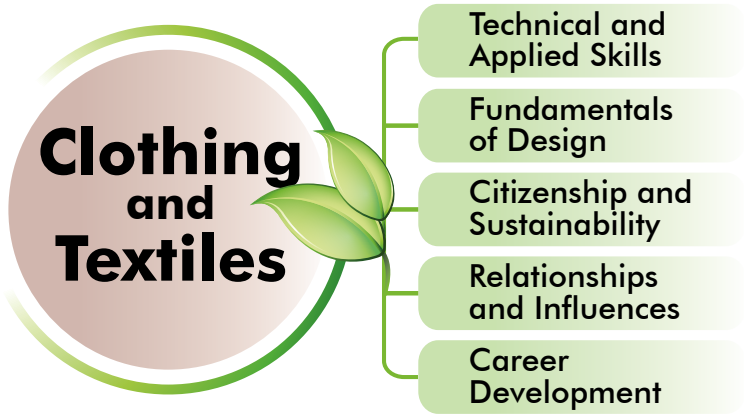
In developing learning outcomes, the assumption was made that courses are taught by experts in their field; therefore, the terminology and language used in the curriculum is specific to the area of expertise.

Middle Years Clothing and Textiles

Clothing and textiles courses create awareness of the role that clothing and textiles play in our daily lives. The learning outcomes develop skills, knowledge, and understanding as students participate in learning activities that allow them to express themselves through designing, producing, and evaluating finished textile projects.

In Manitoba, the content of the Middle Years Clothing and Textiles learning outcomes are arranged in a series of goals.

1. **Technical and Applied Skills:** The learning experiences in this goal will assist students as they develop the knowledge and skills they need to create products that support individuals, families, and communities. Students will be given the opportunity to explore their ideas through practical experiences in a safe and supportive environment.
2. **Fundamentals of Design:** The learning experiences in this goal will assist students as they develop the knowledge and skills to understand the elements and principles of design as they relate to fashion.
3. **Citizenship and Sustainability:** The learning experiences in this goal will assist students as they develop the knowledge and skills to become citizens who look towards positive changes to connect with community.
4. **Relationships and Influences:** The learning experiences in this goal will assist students as they develop the knowledge and skills they need to build and maintain positive relationships to understand the issues and challenges that affect individuals, families, and communities.
5. **Career Development:** The learning experiences in this goal will assist students as they develop the knowledge and skills that are necessary for effective communication, teamwork, and leadership for success in learning, life, and work.



Terminology

The Truth and Reconciliation Commission of Canada (TRC) Calls to Action identified **education for reconciliation** as one of the areas to redress the legacy of residential schools and advance the process of Canadian reconciliation. All of the courses covered in *Middle Years Human Ecology: Manitoba Curriculum Framework of Outcomes, 2018* support Manitoba Education and Training's contribution to education for reconciliation. For more information on the TRC Calls to Action, see www.trc.ca/websites/trcinstitution/File/2015/Findings/Calls_to_Action_English2.pdf.

The following is an explanation of terms used in the learning outcomes that may be unfamiliar or require clarification:

- **Elder:** A spiritual leader who has cultural and traditional knowledge, who is representative of his or her community, and who First Nations, Métis, and Inuit communities look to for advice and wisdom.
- **Knowledge Keeper(s):** Knowledge Keepers have key knowledge of the past and present and are able to share teachings around both new and old knowledge.
- **Indigenous People(s):** A collective term used to describe the original habitants of the land prior to European contact. The term not only refers to the past but also to today's society, including the Métis nation whose genesis occurred after contact. In Canada, the term *Indigenous Peoples* includes First Nations, Métis, and Inuit people.

Each grade requires students to develop a conceptual knowledge base and skill set. Some learning outcomes will be similar for all four levels; in other situations, each level will build on previous knowledge and will progress from simple to more complex conceptual understanding.

Middle Years Exploratory/Introductory		Middle Years Intermediate	
Grade 5	**Grade 6**	**Grade 7**	**Grade 8**
Goal 1: Demonstrate technical and applied skills.			
GLO 1.1: Demonstrate safe practices and procedures for facilities, processes, tools, and equipment.			
5.1.1.1 Identify and maintain clean work environments.	6.1.1.1 →	7.1.1.1 →	8.1.1.1 →
5.1.1.2 Identify and demonstrate safe behaviour within the work area.	6.1.1.2 →	7.1.1.2 →	8.1.1.2 →
5.1.1.3 Identify and demonstrate safe set-up, handling, and usage of equipment, tools, and materials.	6.1.1.3 →	7.1.1.3 →	8.1.1.3 →
5.1.1.4 Demonstrate and describe safety procedures used to handle textile media (e.g., fabric dyes, paints, markers, adhesives, etc.).	6.1.1.4 →	7.1.1.4 →	8.1.1.4 →
5.1.1.5 Identify, describe, and demonstrate precautionary safety measures for unsafe situations (e.g., recognize ways to prevent accidents; correct any potential for accidents).	6.1.1.5 →	7.1.1.5 →	8.1.1.5 →

Middle Years Exploratory/Introductory		Middle Years Intermediate	
Grade 5	**Grade 6**	**Grade 7**	**Grade 8**
Goal 1: Demonstrate technical and applied skills. *(continued)*			
GLO 1.1: Demonstrate safe practices and procedures for facilities, processes, tools, and equipment. *(continued)*			
5.1.1.6 Identify and know how to respond appropriately to major and minor accidents.	6.1.1.6 →	7.1.1.6 →	8.1.1.6 →
5.1.1.7 Identify, describe, use, and care for equipment, tools, and materials.	6.1.1.7 →	7.1.1.7 →	8.1.1.7 →
5.1.1.8 Demonstrate the proper use and care of the sewing machine.	6.1.1.8 Demonstrate the proper use and care of sewing machines and equipment (e.g., serger, embroidery machine, heat press, etc.).	7.1.1.8 →	8.1.1.8 →
GLO 1.2: Demonstrate literacy and numeracy skills as they apply to equipment and tools.**			
** The Imperial measurement system is new to the student and is covered in the Grade 10 Mathematics curriculum. Adding and subtracting fractions is new to the student and is covered in the Grade 7 Mathematics curriculum.			
5.1.2.1 Identify, describe, use, and care for equipment and tools (e.g., cutting, pins, needles, measuring tape, iron).	6.1.2.1 →	7.1.2.1 Identify, describe, select, use, and care for equipment and tools for the task (e.g., cutting, pins, needles, measuring tape, iron).	8.1.2.1 Analyze equipment and tools in order to select the proper tool for the task (e.g., selecting between types of shears, scissors, or rotary cutter).

Middle Years Exploratory/Introductory		Middle Years Intermediate	
Grade 5	**Grade 6**	**Grade 7**	**Grade 8**
Goal 1: Demonstrate technical and applied skills. *(continued)*			
GLO 1.2: Demonstrate literacy and numeracy skills as they apply to equipment and tools. *(continued)*			
5.1.2.2 Identify gradations on a variety of measuring tools (e.g., measuring tape or gauge).	6.1.2.2 Identify and use the proper measuring tool for the task.	7.1.2.2 →	8.1.2.2 →
5.1.2.3 List imperial and metric abbreviations on basic tools.	6.1.2.3 List imperial and metric abbreviations on a variety of measuring tools.	7.1.2.3 →	8.1.2.3 →
5.1.2.4 Identify the heat settings on an iron.	6.1.2.4 →	7.1.2.4 Identify and use the proper heat setting for the fabric property (e.g., cotton, synthetics, etc.).	8.1.2.4 →
5.1.2.5 List the main parts of a sewing machine (e.g., hand wheel, needle plate, etc.).	6.1.2.5 Identify the main parts of the sewing machine and describe their functions.	7.1.2.5 →	8.1.2.5 →
	6.1.2.6 Identify and describe the main parts of specialty machine(s) and their functions.	7.1.2.6 →	8.1.2.6 →

Middle Years Exploratory/Introductory		Middle Years Intermediate	
Grade 5	**Grade 6**	**Grade 7**	**Grade 8**
Goal 1: Demonstrate technical and applied skills. *(continued)* **GLO 1.3:** Demonstrate literacy and numeracy skills as they apply to patterns and materials.**			
** The Imperial measurement system is new to the student and is covered in the Grade 10 Mathematics curriculum. Adding and subtracting fractions is new to the student and is covered in the Grade 7 Mathematics curriculum.			
5.1.3.1 Identify metric and imperial measurement (e.g., cm, inches) in a pattern/ project.	6.1.3.1 →	7.1.3.1 Apply metric and imperial measurement in a pattern/project.	8.1.3.1 →
5.1.3.2 Identify basic textile terminology related to pattern use (e.g., selvage, grain, fold, etc.).	6.1.3.2 →	7.1.3.2 Identify basic textile terminology related to pattern use (e.g., selvage, grain, bias, fold, etc.).	8.1.3.2 →
5.1.3.3 Identify basic pattern symbols (e.g., notches, grainline, place on fold).	6.1.3.3 →	7.1.3.3 Demonstrate the ability to read and interpret pattern symbols.	8.1.3.3 →
5.1.3.4 Demonstrate basic preconstruction procedures as applied to a project (e.g., pattern layout, pinning, cutting, marking techniques).	6.1.3.4 →	7.1.3.4 Demonstrate basic preconstruction procedures as applied to a project (e.g., fabric preparation, pattern layout, pinning, cutting, marking techniques).	8.1.3.4 →
5.1.3.5 Demonstrate the ability to match and pin.	6.1.3.5 →	7.1.3.5 →	8.1.3.5 →

Middle Years Exploratory/Introductory		Middle Years Intermediate	
Grade 5	**Grade 6**	**Grade 7**	**Grade 8**
Goal 1: Demonstrate technical and applied skills. *(continued)*			
GLO 1.3: Demonstrate literacy and numeracy skills as they apply to patterns and materials. *(continued)*			
5.1.3.6 Identify and demonstrate proper cutting techniques.	6.1.3.6 →	7.1.3.6 Select and demonstrate the proper cutting techniques (e.g., shears, grading, etc.).	8.1.3.6 →
		7.1.3.7 Demonstrate correct body-measuring techniques.	8.1.3.7 →
		7.1.3.8 Demonstrate the ability to research and interpret information from a variety of pattern sources (e.g., Internet, social media, fabric store).	8.1.3.8 →
GLO 1.4: Demonstrate literacy and numeracy skills as they apply to construction fundamentals.			
5.1.4.1 Identify basic construction vocabulary (e.g., terms, techniques, etc.).	6.1.4.1 →	7.1.4.1 Demonstrate the ability to use the appropriate construction vocabulary to complete a project.	8.1.4.1 →
5.1.4.2 Demonstrate the ability to read and follow project instructions (e.g., using text and/or images).	6.1.4.2 →	7.1.4.2 Demonstrate the ability to read, interpret, and follow instructions.	8.1.4.2 →

Middle Years Exploratory/Introductory		Middle Years Intermediate	
Grade 5	**Grade 6**	**Grade 7**	**Grade 8**
Goal 1: Demonstrate technical and applied skills. *(continued)* **GLO 1.4:** Demonstrate literacy and numeracy skills as they apply to construction fundamentals. *(continued)*			
5.1.4.3 Demonstrate basic hand sewing and/or machine techniques.	6.1.4.3 →	7.1.4.3 Demonstrate basic hand sewing and/or machine construction procedures (e.g., sample and practice seams, seam finishes, etc.).	8.1.4.3 →
5.1.4.4 Complete project(s) using hand and/or machine sewing techniques (e.g., simple projects such as a bookmark with button, beadwork, leather drums, etc.).	6.1.4.4 Complete project(s) using hand and/or machine sewing techniques (e.g., basic projects such as a pillow, kite, puppet, stuffed animals).	7.1.4.4 Produce projects using hand and/or machine sewing techniques (e.g., advanced projects such as a garment, gym bag, or accessory).	8.1.4.4 →
5.1.4.5 Complete project(s) according to a specified criteria, including timelines, to produce a quality product.	6.1.4.5 →	7.1.4.5 →	8.1.4.5 →
		7.1.4.6 Evaluate and critique a textile product according to a set criteria.	8.1.4.6 →

Middle Years Exploratory/Introductory		Middle Years Intermediate	
Grade 5	**Grade 6**	**Grade 7**	**Grade 8**
Goal 1: Demonstrate technical and applied skills. *(continued)* **GLO 1.5:** Develop understanding of a variety of fabrics.			
		7.1.5.1 Identify basic textile terminology (e.g., fibres, yarns, and fabric).	8.1.5.1 →
		7.1.5.2 List natural and human-made sources of fibres (e.g., plant, animal, mineral, and chemical).	8.1.5.2 Categorize what adolescents are wearing as either natural or human-made fibres (or both/blends).
		7.1.5.3 Describe methods of fabric production (e.g., woven, knit, felt, etc.).	8.1.5.3 →
		7.1.5.4 Describe textile labels as a source of information (e.g., care symbols, fibre content, country of origin, size, etc.).	8.1.5.4 Explain the Canadian textile care symbol system.
			8.1.5.5 Describe methods of care for clothing/textile products to maintain their appearance and longevity (clothing care labels, laundering processes/products, and stain removal).

Middle Years Exploratory/Introductory		Middle Years Intermediate	
Grade 5	**Grade 6**	**Grade 7**	**Grade 8**
Goal 2: Demonstrate understanding of fundamentals of design. **GLO 2.1:** Develop understanding of the elements of design.			
5.2.1.1 Identify colour and texture as basic elements of design in projects and/or images.	6.2.1.1 →	7.2.1.1 Identify basic elements of design (e.g., colour, texture, line, shape, and space in projects and/or images).	8.2.1.1 →
5.2.1.2 Demonstrate proper application of simple textile media and embellishments as related to colour and texture (e.g., fabric markers, paints, and beading).	6.2.1.2 Demonstrate proper application of basic textile media and embellishments as related to colour and texture (e.g., dye, embroidery, and appliqué).	7.2.1.2 Demonstrate proper application of advanced textile media and embellishments as related to the elements of design.	8.2.1.2 →

Middle Years Exploratory/Introductory		Middle Years Intermediate	
Grade 5	**Grade 6**	**Grade 7**	**Grade 8**
Goal 2: Demonstrate understanding of fundamentals of design. **GLO 2.2:** Develop understanding of culture within clothing/textiles.			
Teachers are encouraged to access additional resources and/or consult with an Elder(s) or Knowledge Keeper(s) when implementing Indigenous learning outcomes that address traditional protocols. See Appendix 3.			
5.2.2.1 Identify factors that influence clothing/ textile choices (e.g., family, peers, media, culture, role, environment, religious, social, ethical, economics).	6.2.2.1 →	7.2.2.1 →	8.2.2.1 →
5.2.2.2 Define culture, identify the clothing/textile symbolism related to various cultures (e.g., motifs, patterns).	6.2.2.2 →	7.2.2.2 Define culture and identify clothing/textile products that are an expression of culture and heritage.	8.2.2.2 →
5.2.2.3 Identify and explain the appropriate use of traditional dress (e.g., celebrations, ceremonies, competitions).	6.2.2.3 →	7.2.2.3 →	8.2.2.3 →

Middle Years Exploratory/Introductory		Middle Years Intermediate	
Grade 5	**Grade 6**	**Grade 7**	**Grade 8**
Goal 3: Demonstrate understanding of citizenship and sustainability. **GLO 3.1:** Explore clothing security and social justice as they relate to clothing/textiles.			
5.3.1.1 Identify Maslow's Hierarchy of Needs in relation to clothing security.	6.3.1.1 →	7.3.1.1 →	8.3.1.1 →
5.3.1.2 Describe clothing security (e.g., availability and accessibility) at the community level.	6.3.1.2 →	7.3.1.2 Describe clothing security (e.g., availability and accessibility) within rural, urban, and/or northern locations.	8.3.1.2 Describe clothing security (e.g., availability, accessibility, adequacy, and acceptability) within rural, urban, and/or northern locations.
5.3.1.3 Identify local programs to increase clothing security (e.g., education programs, thrift stores, clothing drives, etc.).	6.3.1.3 Identify sources of surplus clothing and how they can contribute to clothing security (e.g., clothes swapping, donations, recycled within the family/friends/clan, etc.).	7.3.1.3 Investigate how to access and/or contribute to clothing initiatives to connect with communities in rural, urban, and/or northern locations.	8.3.1.3 Create an action plan that would demonstrate the sharing of clothing with those in need.
5.3.1.4 Investigate opportunities to benefit your community through service learning projects (e.g., sewing for others).	6.3.1.4 →	7.3.1.4 Investigate opportunities to benefit your community through service learning projects (e.g., sewing for others, collecting and repairing items, raising awareness, etc.).	8.3.1.4 →

Middle Years Exploratory/Introductory		Middle Years Intermediate	
Grade 5	**Grade 6**	**Grade 7**	**Grade 8**
Goal 3: Demonstrate understanding of citizenship and sustainability. *(continued)* **GLO 3.2:** Explore making informed and responsible consumer decisions related to clothing/textiles.			
5.3.2.1 Identify consumer responsibilities when purchasing of clothing/textile products (e.g., quality, value, and cost).	6.3.2.1 →	7.3.2.1 Compare the quality, value, and cost of clothing/ textile products from different sources (e.g., retail, thrift stores, consignment, clothes swapping, etc.)	8.3.2.1 →
5.3.2.2 Identify sources of underutilized clothing/ textiles products in your community (e.g., online, thrift, consignment, and up-cycle stores).	6.3.2.2 →	7.3.2.2 →	8.3.2.2 →
5.3.2.3 Identify ways in which a product can be up-cycled (e.g., repair, alter, re-design, recycled).	6.3.2.3 →	7.3.2.3 →	8.3.2.3 →
5.3.2.4 Produce a simple up-cycled project (e.g., t-shirt into pillow, glove monsters, etc.).	6.3.2.4 Produce a basic up-cycled project (e.g., sock puppets, fabric scraps into pillow or organizer, etc.).	7.3.2.4 Produce an advanced up-cycled project (e.g., shorts into skirt, jackets into vests, jeans into bag, etc.).	8.3.2.4 →
			8.3.2.5 Demonstrate the ability to repair and/or alter personal clothing or accessories using basic sewing skills (e.g., apply an appliqué/patch, replace a button, alter a hem, repair a seam).

Middle Years Exploratory/Introductory		Middle Years Intermediate	
Grade 5	**Grade 6**	**Grade 7**	**Grade 8**
Goal 4: Demonstrate understanding of relationships and influences. **GLO 4.1:** Develop understanding of influences on clothing/textile choices.			
5.4.1.1 Describe the difference between needs and wants as they relate to clothing/textile choices.	6.4.1.1 Identify current clothing/textile choices as needs or wants.	7.4.1.1 →	8.4.1.1 →
5.4.1.2 Identify current clothing/textiles fads.	6.4.1.2 →	7.4.1.2 Identify clothing/textiles fads and how they affect your personal clothing choices.	8.4.1.2 Describe the influences on clothing/textiles fads (e.g., culture, media, etc.)
5.4.1.3 Identify current use of technology in clothing/textiles products.	6.4.1.3 →	7.4.1.3 Identify the current and future use of technology in clothing/textile products.	8.4.1.3 →

Middle Years Exploratory/Introductory		Middle Years Intermediate	
Grade 5	**Grade 6**	**Grade 7**	**Grade 8**
Goal 4: Demonstrate understanding of relationships and influences. *(continued)* **GLO 4.2:** Develop understanding of the relationship between clothing and body image.			
5.4.2.1 Identify the significance of clothing/textile choices in various social settings (e.g., non-verbal communication, dress codes, roles, messages).	6.4.2.1 →	7.4.2.1 Explain the ability of clothing/textiles to satisfy physical and socio-emotional needs (e.g., protection, comfort, status, identification, etc.).	8.4.2.1 →
5.4.2.2 Identify impact of the media (e.g., Internet, social media, apps) on personal clothing choices.	6.4.2.2 Describe how media influences (e.g., Internet, social media, apps) on personal clothing choices (e.g., marketing strategies such as digital manipulation, etc.).	7.4.2.2 Examine the marketing strategies (e.g., digital manipulation, target market, information technology, etc.) used in clothing media campaigns.	8.4.2.2 Examine the marketing strategies (e.g., digital manipulation, target market, information technology, etc.) used in clothing media campaigns and their influences on positive mental and physical well-being. 8.4.2.3 Identify strategies (e.g., positive self-talk; participate in activities; talk with friends, family, and clan) to develop and maintain a positive body image with the understanding that healthy bodies come in a variety of shapes and sizes.

Middle Years Exploratory/Introductory		Middle Years Intermediate	
Grade 5	**Grade 6**	**Grade 7**	**Grade 8**
Goal 5: Demonstrate understanding of career development and the skills required. **GLO 5.1:** Demonstrate personal and social skills. **Note:** GLO 5.1 to 5.3 outcomes are to be integrated throughout the clothing and textiles course and are not intended to be a unit of study.			
5.6.1.1 Demonstrate understanding of others and their perspectives.	6.5.1.1 →	7.5.1.1 →	8.5.1.1 →
5.6.1.2 Communicate effectively with others.	6.5.1.2 →	7.5.1.2 →	8.5.1.2 →
5.6.1.3 Participate in a positive manner.	6.5.1.3 →	7.5.1.3 →	8.5.1.3 →
5.6.1.4 Demonstrate responsibility in being accountable for their actions.	6.5.1.4 →	7.5.1.4 →	8.5.1.4 →
5.6.1.5 Listen in order to understand and learn.	6.5.1.5 →	7.5.1.5 →	8.5.1.5 →
5.6.1.6 Enhance personal growth through continuous learning.	6.5.1.6 →	7.5.1.6 →	8.5.1.6 →

Middle Years Exploratory/Introductory		Middle Years Intermediate	
Grade 5	**Grade 6**	**Grade 7**	**Grade 8**
Goal 5: Demonstrate understanding of career development and the skills required. *(continued)* **GLO 5.2:** Demonstrate thinking and decision-making skills			
5.5.2.1 Explain their thinking to others in a way that is clear, accurate, logical, and complete.	6.5.2.1 →	7.5.2.1 →	8.5.2.1 →
5.5.2.2 Use innovative thinking in decision making.	6.5.2.2 →	7.5.2.2 →	8.5.2.2 →
5.5.2.3 Compare and contrast common approaches to decision making.	6.5.2.3 →	7.5.2.3 →	8.5.2.3 →
5.5.2.4 Identify factors that affect decision making.	6.5.2.4 →	7.5.2.4 →	8.5.2.4 →
5.5.2.5 Interpret fact from opinion when making effective decisions.	6.5.2.5 →	7.5.2.5 →	8.5.2.5 →
5.5.2.6 Predict and analyze the outcome of a decision.	6.5.2.6 →	7.5.2.6 →	8.5.2.6 →
5.5.2.7 Apply decision-making strategies to learning, life, and work.	6.5.2.7 →	7.5.2.7 →	8.5.2.7 →

Middle Years Exploratory/Introductory		Middle Years Intermediate	
Grade 5	**Grade 6**	**Grade 7**	**Grade 8**
Goal 5: Demonstrate understanding of career development and the skills required. *(continued)* **GLO 5.3:** Demonstrate teamwork.			
5.5.3.1 Demonstrate the ability to work independently and collaboratively as a team member.	6.5.3.1 →	7.5.3.1 →	8.5.3.1 →
5.5.3.2 Develop strategies to build positive and respectful working relationships with all team members.	6.5.3.2 →	7.5.3.2 →	8.5.3.2 →
5.5.3.3 Recognize and acknowledge the opinions and contributions of team members to build consensus to achieve individual/team goals.	6.5.3.3 →	7.5.3.3 →	8.5.3.3 →
5.5.3.4 Use a variety of strategies to resolve conflicts peacefully and fairly with respect for others.	6.5.3.4 →	7.5.3.4 →	8.5.3.4 →
5.5.3.5 Collaborate with others to establish and determine individual/team member roles, goals, and responsibilities.	6.5.3.5 →	7.5.3.5 →	8.5.3.5 →

Middle Years Exploratory/Introductory		Middle Years Intermediate	
Grade 5	**Grade 6**	**Grade 7**	**Grade 8**
Goal 5: Demonstrate understanding of career development and the skills required. *(continued)* **GLO 5.4:** Explore careers related to clothing and textiles.			
5.5.4.1 Identify personal interests, aptitudes, skills, knowledge, and successes experienced in the clothing and textiles classroom.	6.5.4.1 →	7.5.4.1 →	8.5.4.1 →
5.5.4.2 Describe the connection between interests and skills in the clothing and textiles education, at home and in the community with skills required in the world of work.	6.5.4.2 →	7.5.4.2 →	8.5.4.2 →
5.5.4.3 Identify types of work that are available based on experiences in the clothing and textiles classroom (e.g., marketing, design, retail, production, industry, technology, arts, and education).	6.5.4.3 →	7.5.4.3 →	8.5.4.3 →

Middle Years Exploratory/Introductory		Middle Years Intermediate	
Grade 5	**Grade 6**	**Grade 7**	**Grade 8**
Goal 5: Demonstrate understanding of career development and the skills required. *(continued)* **GLO 5.4:** Explore careers related to clothing and textiles. *(continued)*			
5.5.4.4 Explain that career planning starts when interest and learning opportunities are available.	6.5.4.4 →	7.5.4.4 →	8.5.4.4 → 8.5.4.5 Explore interests and discover opportunities to personalize an education path, making informed high school course selections, as well as informed post-secondary and employment decisions.

MIDDLE YEARS
FOOD AND NUTRITION

Manitoba Curriculum
Framework of Outcomes

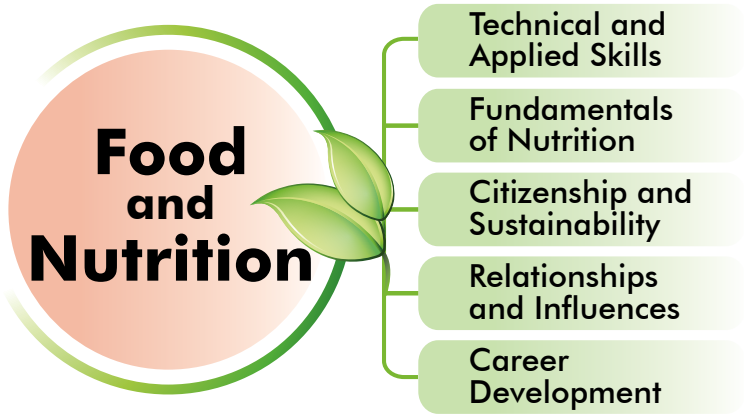
In developing learning outcomes, the assumption was made that courses are taught by experts in their field; therefore, the terminology and language used in the curriculum is specific to the area of expertise.

Middle Years Food and Nutrition

The food and nutrition area of study teaches about healthy relationships with food through theoretical and practical food experiences. A study of food and nutrition can expose students to accurate information and provide opportunities for them to gain competence in making informed choices. The learning outcomes develop skills, knowledge, and understanding of basic food preparation and nutrition.

In Manitoba, the content of the Middle Years Food and Nutrition outcomes are arranged in a series of goals.

1. **Technical and Applied Skills:** The learning experiences in this goal will assist students as they develop the knowledge and skills they need to create products that support individuals, families, and communities. Students will be given the opportunity to explore their ideas through practical experiences in a safe and supportive environment.
2. **Fundamentals of Nutrition:** The learning experiences in this goal will assist students as they develop the knowledge and skills they need to evaluate nutrition knowledge and develop an appreciation of food to enhance the health and well-being of individuals, families, and communities.
3. **Citizenship and Sustainability:** The learning experiences in this goal will assist students as they develop the knowledge and skills to become citizens who look towards positive changes to connect with community.
4. **Relationships and Influences:** The learning experiences in this goal will assist students as they develop the knowledge and skills they need to build and maintain positive relationships to understand the issues and challenges that affect individuals, families, and communities.
5. **Career Development:** The learning experiences in this goal will assist students as they develop the knowledge and skills that are necessary for effective communication, teamwork, and leadership for success in learning, life, and work.



Terminology

The Truth and Reconciliation Commission of Canada (TRC) Calls to Action identified **education for reconciliation** as one of the areas to redress the legacy of residential schools and advance the process of Canadian reconciliation. All of the courses covered in *Middle Years Human Ecology: Manitoba Curriculum Framework of Outcomes, 2018* support Manitoba Education and Training's contribution to education for reconciliation. For more information on the TRC Calls to Action, see www.trc.ca/websites/trcinstitution/File/2015/Findings/Calls_to_Action_English2.pdf.

The following is an explanation of terms used in the learning outcomes that may be unfamiliar or require clarification:

- **Elder:** A spiritual leader who has cultural and traditional knowledge, who is representative of his or her community, and who First Nations, Métis, and Inuit communities look to for advice and wisdom.
- **Knowledge Keeper(s):** Knowledge Keepers have key knowledge of the past and present and are able to share teachings around both new and old knowledge.
- **Indigenous People(s):** A collective term used to describe the original habitants of the land prior to European contact. The term not only refers to the past but also to today's society, including the Métis nation whose genesis occurred after contact. In Canada, the term *Indigenous Peoples* includes First Nations, Métis, and Inuit people.

Each grade requires that students develop a conceptual knowledge base and skill set. Some learning outcomes will be similar for all four levels; in other situations, each level will build on previous knowledge and will progress from simple to more complex conceptual understandings.

Outcomes marked with an asterisk (*) have been reproduced from *The Ontario Curriculum Grades 9 to 12 Social Sciences and Humanities* under its terms for non-commercial reproduction.

Middle Years Exploratory/Introductory		Middle Years Intermediate	
Grade 5	**Grade 6**	**Grade 7**	**Grade 8**
Goal 1: Demonstrate technical and applied skills. **GLO 1.1:** Demonstrate appropriate sanitation practices.			
5.1.1.1 Identify and demonstrate personal hygiene (e.g., washing hands, tying hair back, cleaning, and wearing appropriate clothing).	6.1.1.1 →	7.1.1.1 →	8.1.1.1 →
5.1.1.2 Identify and maintain a sanitary kitchen (e.g., meet established sanitation standards: dishwashing, dish drying, clean workspace).	6.1.1.2 →	7.1.1.2 →	8.1.1.2 →

Middle Years Exploratory/Introductory		Middle Years Intermediate	
Grade 5	**Grade 6**	**Grade 7**	**Grade 8**
Goal 1: Demonstrate technical and applied skills. *(continued)* **GLO 1.2:** Create and maintain a safe working environment.			
5.1.2.1 Identify and demonstrate safe behaviour within the work area.	6.1.2.1 →	7.1.2.1 →	8.1.2.1 →
5.1.2.2 Identify and demonstrate safe set-up, handling, and usage of tools, equipment, appliances, and chemicals (e.g., detergents, bleach, sanitizers) in a kitchen environment.	6.1.2.2 →	7.1.2.2 →	8.1.2.2 →
5.1.2.3 Identify and know how to respond appropriately to common kitchen accidents (e.g., major and minor).	6.1.2.3 →	7.1.2.3 →	8.1.2.3 →
5.1.2.4 Identify, describe, and demonstrate precautionary safety measures for dangerous situations within the food preparation area (e.g., recognize ways to prevent accidents, correct any potential for accidents).	6.1.2.4 →	7.1.2.4 →	8.1.2.4 →

Middle Years Exploratory/Introductory		Middle Years Intermediate	
Grade 5	**Grade 6**	**Grade 7**	**Grade 8**
Goal 1: Demonstrate technical and applied skills. *(continued)* **GLO 1.3:** Demonstrate safe and sanitary food handling practices.			
5.1.3.1 Identify and demonstrate safe food handling practices.	6.1.3.1 →	7.1.3.1 →	8.1.3.1 →
5.1.3.2 Identify and demonstrate storage techniques to ensure food safety.	6.1.3.2 →	7.1.3.2 →	8.1.3.2 →
		7.1.3.3 Identify types of food-borne illness, their causes, and their prevention in the home.	8.1.3.3 →

Appropriate food handling and health protection are a priority of your school and community. The Manitoba Health Protection Unit encourages schools to consult with their regional public health inspector when planning to use food preparation spaces and facilities beyond their original intended purpose. The Health Protection Unit can be contacted at health.protection@gov.mb.ca to ensure that the intended use of the space is in compliance with the requirements of the *Public Health Act*.

Middle Years Exploratory/Introductory		Middle Years Intermediate	
Grade 5	**Grade 6**	**Grade 7**	**Grade 8**
Goal 1: Demonstrate technical and applied skills. *(continued)* **GLO 1.4:** Demonstrate literacy skills as they apply to food and nutrition.			
5.1.4.1 Identify sources and styles of recipes (e.g., cookbooks, Internet, food packages, friends/family/ community/clan/social media, etc.).	6.1.4.1 →	7.1.4.1 Identify different parts of various styles of recipes (e.g., list of ingredients, directions, yield, prep time).	8.1.4.1 Demonstrate the ability to determine at a glance the critical details within a recipe.
5.1.4.2 Identify ingredients that are required in a recipe.	6.1.4.2 →	7.1.4.2 Identify ingredients that are required in a recipe and those that are optional.	8.1.4.2 →
5.1.4.3 Identify food preparation vocabulary (e.g., terms, techniques, etc.) used in a recipe.	6.1.4.3 Define food preparation vocabulary used in a recipe.	7.1.4.3 Demonstrate the ability to use the appropriate food vocabulary of food production.	8.1.4.3 →
5.1.4.4 Demonstrate the ability to read, interpret, and follow a recipe accurately.	6.1.4.4 →	7.1.4.4 →	8.1.4.4 →

Middle Years Exploratory/Introductory		Middle Years Intermediate	
Grade 5	**Grade 6**	**Grade 7**	**Grade 8**
Goal 1: Demonstrate technical and applied skills. *(continued)*			
GLO 1.5: Demonstrate numeracy skills as they apply to food and nutrition.**			
** The Imperial measurement system is new to the student and is covered in the Grade 10 Mathematics curriculum. Adding and subtracting fractions is new to the student and is covered in the Grade 7 Mathematics curriculum.			
5.1.5.1 Identify measuring equipment for metric and imperial recipes (e.g., dry and liquid measuring cups, measuring spoons).	6.1.5.1 →	7.1.5.1 Apply mathematical skills correctly with metric and imperial measurement units.	8.1.5.1 →
5.1.5.2 Identify metric and imperial units of measurement on measuring equipment (e.g., millilitres, cups, teaspoons, tablespoons, ounces, grams).	6.1.5.2 →	7.1.5.2 Select the correct measuring equipment for metric and imperial recipes.	8.1.5.2 →
5.1.5.3 Identify correct metric and imperial measuring techniques for accuracy and reliability (e.g., correct way to use dry/liquid measuring cups, measuring spoons).	6.1.5.3 →	7.1.5.3 Demonstrate correct measuring techniques for metric and imperial recipes.	8.1.5.3 →
5.1.5.4 Identify imperial and metric measurement and their abbreviations (e.g., C, tsp., mL).	6.1.5.4 →	7.1.5.4 Demonstrate the use of imperial and metric measurement and their abbreviations.	8.1.5.4 →

Middle Years Exploratory/Introductory		Middle Years Intermediate	
Grade 5	**Grade 6**	**Grade 7**	**Grade 8**
Goal 1: Demonstrate technical and applied skills. *(continued)*			
GLO 1.5: Demonstrate numeracy skills as they apply to food and nutrition.** *(continued)*			
5.1.5.5 Identify metric and imperial units of heat and their abbreviations (e.g., Fahrenheit, Celsius, °C, °F).	6.1.5.5 →	7.1.5.5 Demonstrate the ability to use the correct unit of heat (°C or °F) in a recipe with the available heat source (e.g., range, oven, grill, small electric appliances, etc.), and convert as required.	8.1.5.5 →
GLO 1.6: Demonstrate understanding of food preparation fundamentals and skills.			
5.1.6.1 Identify functions of various ingredients (e.g., flours, liquids, fats, eggs, leavening agents, etc.).	6.1.6.1 →	7.1.6.1 Describe functions of various ingredients (e.g., flours, liquids, fats, eggs, leavening agents, etc.).	8.1.6.1 →
5.1.6.2 Identify safe cutting techniques (e.g., slicing, julienne, chopping, mincing, etc.).	6.1.6.2 →	7.1.6.2 →	8.1.6.2 Identify and demonstrate safe cutting techniques (e.g., slicing vs. julienne; chopping vs. mincing, etc.).
5.1.6.3 Identify mixing techniques (e.g., stirring, beating, cutting in, folding in, etc.).	6.1.6.3 →	7.1.6.3 Identify and demonstrate the mixing techniques.	8.1.6.3 Select and demonstrate proper mixing techniques (e.g., stirring vs. beating; cutting in vs. folding in, etc.).

Middle Years Exploratory/Introductory		Middle Years Intermediate	
Grade 5	**Grade 6**	**Grade 7**	**Grade 8**
Goal 1: Demonstrate technical and applied skills. *(continued)*			
GLO 1.6: Demonstrate understanding of food preparation fundamentals and skills. *(continued)*			
5.1.6.4 Identify proper heat settings on a variety of cooking appliances (e.g., range, oven, grill, microwave, small electric appliances, etc.).	6.1.6.4 →	7.1.6.4 Identify and demonstrate proper heat settings on a variety of cooking appliances (e.g., maximum heat brings water to a boil, minimum heat keeps foods warm).	8.1.6.4 →
5.1.6.5 Identify a variety of cooking methods (e.g., boil, simmer, braise, stew, fry, sauté, etc.).	6.1.6.5 →	7.1.6.5 Identify and demonstrate proper cooking methods.	8.1.6.5 →
5.1.6.6 Demonstrate safe and hygienic food and cooking preparation techniques, using current and advanced technologies to produce a quality product.	6.1.6.6 →	7.1.6.6 →	8.1.6.6 →
5.1.6.7 Complete recipe(s) according to specific criteria, including timelines, to produce a quality product.	6.1.6.7 →	7.1.6.7 →	8.1.6.7 →

Middle Years Exploratory/Introductory		Middle Years Intermediate	
Grade 5	**Grade 6**	**Grade 7**	**Grade 8**
Goal 1: Demonstrate technical and applied skills. *(continued)* **GLO 1.6:** Demonstrate understanding of food preparation fundamentals and skills. *(continued)*			
5.1.6.8 Prepare and serve a food item(s) that reflects current nutritional guidelines and also fits into a balanced eating plan for optimal health (e.g., snacks, entrees, soups, desserts, breakfasts, etc.).	6.1.6.8 →	7.1.6.8 →	8.1.6.8 →
5.1.6.9 Prepare and serve food item(s) from different countries/ nations using culturally specific ingredients, techniques, and equipment.	6.1.6.9 →	7.1.6.9 →	8.1.6.9 →
		7.1.6.10 Evaluate and critique a food item(s) and/or recipe(s) according to a set criteria.	8.1.6.10 →

Middle Years Exploratory/Introductory		Middle Years Intermediate	
Grade 5	**Grade 6**	**Grade 7**	**Grade 8**
Goal 2: Demonstrate understanding of fundamentals of nutrition. **GLO 2.1:** Develop understanding of nutrients.			
5.2.1.1 Define the term *nutrient*.	6.2.1.1 →	7.2.1.1 →	8.2.1.1 →
5.2.1.2 Identify the six classifications of nutrients (i.e., carbohydrates, protein, fats, vitamins, minerals, water).	6.2.1.2 →	7.2.1.2 List nutrients within each main nutrient category (e.g., vitamins and minerals).	8.2.1.2 Categorize nutrients according to their main nutrient category (e.g., calcium is a mineral).
5.2.1.3 Identify Canada's dietary guidelines (e.g., versions of Canada's Food Guide).	6.2.1.3 →	7.2.1.3 Compare Canada's dietary guidelines as they apply to diverse Canadian cultures (e.g., Canada's Food Guide).	8.2.1.3 Compare dietary guidelines throughout the world, based on classroom composition or student interest (e.g., Canada's Food Guide).
5.2.1.4 Identify the key messages and recommendations in Canada's dietary guidelines (e.g., nutrients, exercise, illustrations, foods emphasized).	6.2.1.4 →	7.2.1.4 Describe the key messages and recommendations in Canada's dietary guidelines as they apply to rural, urban, and northern locations.	

Middle Years Exploratory/Introductory		Middle Years Intermediate	
Grade 5	**Grade 6**	**Grade 7**	**Grade 8**
Goal 2: Demonstrate understanding of fundamentals of nutrition. *(continued)* **GLO 2.1:** Develop understanding of nutrients. *(continued)*			
5.2.1.5 Identify personal food choices (e.g., diversity within the food groups, food choices such as *seldom*, *sometimes*, and *often*), and recommended serving sizes.	6.2.1.5 →	7.2.1.5 Identify diverse foods within the food groups (e.g., non-dairy sources of calcium, nutrient-dense foods), recommended serving sizes, key messages, and recommendations according to Canada's dietary guidelines.	8.2.1.5 →
		7.2.1.6 Explain the benefits of Canada's dietary guidelines for overall adolescent health.	8.2.1.6 Identify how Canada's dietary guidelines meet a variety of dietary needs and lifestyles (e.g., athlete, vegetarian, food allergies/ intolerances, etc.)
		7.2.1.7 Identify a meal plan(s) that include(s) a variety of foods according to Canada's dietary guidelines.	8.2.1.7 Develop a personal meal plan(s) that incorporates a variety of foods according to Canada's dietary guidelines (e.g., include an apple with lunch, add healthy foods into meals such as adding a chopped apple into coleslaw).

Middle Years Exploratory/Introductory		Middle Years Intermediate	
Grade 5	**Grade 6**	**Grade 7**	**Grade 8**
Goal 2: Demonstrate understanding of fundamentals of nutrition. *(continued)* **GLO 2.2:** Demonstrate food literacy for achieving and maintaining health and wellness.			
5.2.2.1 List reliable evidence-based sources or references for food and nutrition/health information (e.g., Dietitians of Canada, Health Canada, universities).	6.2.2.1 Discuss the reliability of food and nutrition/health information (e.g., labels, media, social media, Internet, etc.).	7.2.2.1 Compare and contrast a variety of food and nutrition/health resources for reliability (e.g., labels, magazines, Internet sites, social media, health professionals).	8.2.2.1 →
5.2.2.2 Identify food labels as a source of food and nutrition information.	6.2.2.2 List the food and nutrition/health information on labels (e.g., nutrition facts table, ingredient list, nutrition or health claims).	7.2.2.2 Describe how food and nutrition/health information on labels (e.g., nutrition facts table, ingredient list, nutrition claims) are used to identify specific information or to compare food products (e.g., compare products based on fat, salt, sugar, fibre content).	8.2.2.2 Critique a food label for its nutritional/health claims to promote health and wellness.
		7.2.2.3 Analyze food labels to select ingredients and/or food products to meet the nutritional needs of the adolescent.	8.2.2.3 Compare and contrast food labels of various products to make informed food choices to promote health and wellness.

Middle Years Exploratory/Introductory		Middle Years Intermediate	
Grade 5	**Grade 6**	**Grade 7**	**Grade 8**
Goal 2: Demonstrate understanding of fundamentals of nutrition. *(continued)* **GLO 2.3:** Develop understanding of the relationship between food choices and health/wellness.			
Teachers are encouraged to access additional resources and/or consult with other professionals when implementing these outcomes, as they are to be addressed with sensitivity.			
5.2.3.1 Identify factors necessary to maintain a healthy body (e.g., physical activity, balanced diet, fluid replacement, sleep, hygiene practices, and regular medical/ dental checkups).	6.2.3.1 Identify and explain factors necessary to maintain a healthy body.	7.2.3.1 Define a healthy body with the understanding that healthy bodies come in a variety of shapes and sizes (e.g., genetics, growth rate, etc.).	8.2.3.1 →
5.2.3.2 Identify factors that affect energy requirements (e.g., age, body frame/height, gender, activity, dietary and health needs, growth/ development) and how food choices and eating patterns affect health/ wellness.	6.2.3.2 →	7.2.3.2 Explain factors (e.g., activity, food availability, health, etc.) that affect energy requirements, and explain how food choices and eating patterns (e.g., peers, media, social influences) affect short and long-term health/wellness.	8.2.3.2 →
5.2.3.3 Identify impact of the media (e.g., Internet, social media, apps) on food choices and eating patterns (e.g., portion size, fast-food, food delivery apps, eating on the run).	6.2.3.3 Describe how media influences food choices and eating patterns (e.g., marketing strategies, digital manipulation).	7.2.3.3 Describe health claims of food and nutrition products and the effect they have on food choices and eating patterns.	8.2.3.3 Assess whether health claims of food and nutrition products are fact or fiction (e.g., super or miracle foods, foods that "fix" body/health).

Middle Years Exploratory/Introductory		Middle Years Intermediate	
Grade 5	**Grade 6**	**Grade 7**	**Grade 8**
Goal 2: Demonstrate understanding of fundamentals of nutrition. *(continued)* **GLO 2.3:** Develop understanding of the relationship between food choices and health/wellness. *(continued)*			
		7.2.3.4 Develop a personal action plan for making food choices, and use problem-solving strategies to support or improve personal nutritional choices.	8.2.3.4 Identify current and future technological trends in food and nutrition, and discuss the real or perceived benefits to Canadian consumers.

Middle Years Exploratory/Introductory		Middle Years Intermediate	
Grade 5	**Grade 6**	**Grade 7**	**Grade 8**
Goal 3: Demonstrate understanding of citizenship and sustainability.			
GLO 3.1: Explore food security and social justice as they relate to food and nutrition.			
5.3.1.1 Define Maslow's Hierarchy of Needs and how it relates to food safety.	6.3.1.1 →	7.3.1.1 →	8.3.1.1 →
5.3.1.2 Describe food security at the community level (e.g., availability and accessibility).	6.3.1.2 →	7.3.1.2 Describe food security within rural, urban, and/or northern locations (e.g., availability and accessibility).	8.3.1.2 →
5.3.1.3 Identify local food programs to increase food security (e.g., education programs, food banks, community kitchens, food drives, and community gardens, etc.).	6.3.1.3 Identify sources (e.g., restaurants, grocery stores, gardens, etc.) of surplus food and how they can contribute to food programs.	7.3.1.3 Investigate how to access and/or contribute to food initiatives to connect with community in rural, urban, and/or northern locations.	8.3.1.3 Create an action plan to contribute towards a local food program.
GLO 3.2: Explore sustainable food production and consumption practices.			
5.3.2.1 Identify market forms of food (e.g., frozen, fresh, canned, dried, and juiced) available in rural, urban, and northern locations.	6.3.2.1 →	7.3.2.1 Describe factors (e.g., cost, nutrition, and convenience) that influence where people choose to get their food (e.g., hunting/gathering, garden, various forms of stores that sell groceries, farmers' market, pick-your-own, etc.).	8.3.2.1 →

Middle Years Exploratory/Introductory		Middle Years Intermediate	
Grade 5	**Grade 6**	**Grade 7**	**Grade 8**
Goal 3: Demonstrate understanding of citizenship and sustainability. *(continued)* **GLO 3.2:** Explore sustainable food production and consumption practices. *(continued)*			
5.3.2.2 Identify sustainable food practices that reduce the impact on the environment (e.g., packaging, buy local or garden, use of leftovers, etc.).	6.3.2.2 Identify sustainable food preparation and purchasing practices that reduce the impact on the environment (e.g., cooking practices that require less energy, reusable container/ shopping bags, bulk buying).	7.3.2.2 Identify sustainable practices that reduce the impact of food production and consumption on the environment (e.g., organic farming, food co-ops, community garden, composting, recycling).*	8.3.2.2 →
5.3.2.3 Identify Manitoba food that is grown/harvested, reared, caught, and processed locally (e.g., fresh, frozen, seasonal, canned, and dried).	6.3.2.3 →	7.3.2.3 Identify food that is grown/harvested, reared, caught, and processed throughout Canada (e.g., fresh, frozen, seasonal, canned, and dried).	8.3.2.3 →
		7.3.2.4 Identify foods from around the world that are available in Manitoba (e.g., fish, tropical fruits, nuts, coffee, tea, chocolate, etc.).	8.3.2.4 Explain why food products come from different regions of Canada and around the world (e.g., geography, climate, community/local economic development, location, culture, etc.).

Middle Years Exploratory/Introductory		Middle Years Intermediate	
Grade 5	**Grade 6**	**Grade 7**	**Grade 8**
Goal 4: Demonstrate understanding of relationships and influences around food choices. **GLO 4.1:** Develop understanding of influences on food choices.			
Teachers are encouraged to access additional resources and/or consult with an Elder(s) or Knowledge Keeper(s) when implementing Indigenous learning outcomes that address traditional protocols. See Appendix 3.			
5.4.1.1 Identify the importance of food in a social setting.	6.4.1.1 →	7.4.1.1 Explain the importance of food to adolescent social settings.	8.4.1.1 Explain the importance of food in personal and global social settings.
5.4.1.2 Identify and demonstrate meal etiquette (e.g., setting table, sitting, eating as a group, engaging in respectful conversations, etc.).	6.4.1.2 →	7.4.1.2 →	8.4.1.2 →
5.4.1.3 Identify local, regional, and global meal etiquette (e.g., using utensils, setting table, sitting, eating as a group, engaging in respectful conversations, respecting table manners from around the world).	6.4.1.3 Identify etiquette rules for a variety of local, regional, and global situations.	7.4.1.3 Compare and contrast local, regional, and global meal etiquette practices.	8.4.1.3 →

Middle Years Exploratory/Introductory		Middle Years Intermediate	
Grade 5	**Grade 6**	**Grade 7**	**Grade 8**
Goal 4: Demonstrate understanding of relationships and influences around food choices. *(continued)* **GLO 4.1:** Develop understanding of influences on food choices. *(continued)*			
5.4.1.4 Describe the role that food plays in getting to know and understand others of similar and different cultures.	6.4.1.4 Identify ways in which food helps us understand others of similar and different cultures.	7.4.1.4 Explain how adolescents might use food to connect with other adolescents of similar and different cultures.	8.4.1.4 Explain how food connects people of similar and different cultures.
5.4.1.5 Identify foods from diverse cultures in Canada (e.g., spring rolls, fried rice, dahl, wild rice, etc.).	6.4.1.5 Identify and/or describe the cultural origins of ingredients, recipes, and/or food products.	7.4.1.5 Explain how meal planning is influenced by cultural food customs.	8.4.1.5 →
5.4.1.6 Identify the foods eaten traditionally by Indigenous Peoples of Manitoba (e.g., berries, fish, moose, squash).	6.4.1.6 →	7.4.1.6 Investigate the food traditions and protocols of Indigenous Peoples of Manitoba.	8.4.1.6 →

Middle Years Exploratory/Introductory		Middle Years Intermediate	
Grade 5	**Grade 6**	**Grade 7**	**Grade 8**
Goal 4: Demonstrate understanding of relationships and influences around food choices. *(continued)* **GLO 4.2:** Develop understanding of healthy food relationships.			
Teachers are encouraged to access additional resources and/or consult with other professionals when implementing these outcomes, as they are to be addressed with sensitivity.			
5.4.2.1 Describe the difference between needs and wants as they relate to food choices.	6.4.2.1 Identify factors that affect people's food needs and wants as they relate to food choices.	7.4.2.1 Describe factors that affect adolescent food needs and wants as they relate to food choices.	8.4.2.1 Analyze what influences personal food choices as needs or wants.
5.4.2.2 Identify and describe factors that influence food choices (e.g., peer pressure, season, need, time of day, nutrition, culture, emotion, environment, religion, social occasion, ethical belief, cost, etc.).	6.4.2.2 Identify and describe factors that influence the avoidance of certain food choices (e.g., religion, culture, ethical belief, allergy/ intolerance, personal choices, etc.).	7.4.2.2 Explain the ability of food to satisfy physical and socio-emotional needs (e.g., peers, family).	8.4.2.2 Evaluate the ability of food in satisfying your physical and socio-emotional needs.
		7.4.2.3 Identify strategies (e.g., positive self-talk; participate in activities; talk with friends, family, and clan) to develop and maintain a positive body image with the understanding that healthy bodies come in a variety of sizes.	8.4.2.3 →

Middle Years Exploratory/Introductory		Middle Years Intermediate	
Grade 5	**Grade 6**	**Grade 7**	**Grade 8**
Goal 5: Demonstrate understanding of career development and the skills required. **GLO 5.1:** Demonstrate personal and social skills. **Note:** GLO 5.1 to 5.3 outcomes are to be integrated throughout the food and nutrition course and are not intended to be a unit of study.			
5.5.1.1 Demonstrate understanding of others and their perspectives.	6.5.1.1 →	7.5.1.1 →	8.5.1.1 →
5.5.1.2 Communicate effectively with others.	6.5.1.2 →	7.5.1.2 →	8.5.1.2 →
5.5.1.3 Participate in a positive manner.	6.5.1.3 →	7.5.1.3 →	8.5.1.3 →
5.5.1.4 Demonstrate responsibility in being accountable for their actions.	6.5.1.4 →	7.5.1.4 →	8.5.1.4 →
5.5.1.5 Listen in order to understand and learn.	6.5.1.5 →	7.5.1.5 →	8.5.1.5 →
5.5.1.6 Enhance personal growth through continuous learning.	6.5.1.6 →	7.5.1.6 →	8.5.1.6 →

Middle Years Exploratory/Introductory		Middle Years Intermediate	
Grade 5	**Grade 6**	**Grade 7**	**Grade 8**
Goal 5: Demonstrate understanding of career development and the skills required. *(continued)* **GLO 5.2:** Demonstrate thinking and decision-making skills			
5.5.2.1 Explain their thinking to others in a way that is clear, accurate, logical, and complete.	6.5.2.1 →	7.5.2.1 →	8.5.2.1 →
5.5.2.2 Use innovative thinking in decision making.	6.5.2.2 →	7.5.2.2 →	8.5.2.2 →
5.5.2.3 Compare and contrast common approaches to decision making.	6.5.2.3 →	7.5.2.3 →	8.5.2.3 →
5.5.2.4 Identify factors that affect decision making.	6.5.2.4 →	7.5.2.4 →	8.5.2.4 →
5.5.2.5 Interpret fact from opinion when making effective decisions.	6.5.2.5 →	7.5.2.5 →	8.5.2.5 →
5.5.2.6 Predict and analyze the outcome of a decision.	6.5.2.6 →	7.5.2.6 →	8.5.2.6 →
5.5.2.7 Apply decision-making strategies to learning, life, and work.	6.5.2.7 →	7.5.2.7 →	8.5.2.7 →

Middle Years Exploratory/Introductory		Middle Years Intermediate	
Grade 5	**Grade 6**	**Grade 7**	**Grade 8**
Goal 5: Demonstrate understanding of career development and the skills required. *(continued)* **GLO 5.3:** Demonstrate teamwork.			
5.5.3.1 Demonstrate the ability to work independently and collaboratively as a team member.	6.5.3.1 →	7.5.3.1 →	8.5.3.1 →
5.5.3.2 Develop strategies to build positive and respectful working relationships with all team members.	6.5.3.2 →	7.5.3.2 →	8.5.3.2 →
5.5.3.3 Recognize and acknowledge the opinions and contributions of team members to build consensus to achieve individual/team goals.	6.5.3.3 →	7.5.3.3 →	8.5.3.3 →
5.5.3.4 Use a variety of strategies to resolve conflicts peacefully and fairly with respect for others.	6.5.3.4 →	6.5.3.4 →	6.5.3.4 →
5.5.3.5 Collaborate with others to establish and determine individual/team member roles, goals, and responsibilities.	6.5.3.5 →	7.5.3.5 →	8.5.3.5 →

Middle Years Exploratory/Introductory		Middle Years Intermediate	
Grade 5	**Grade 6**	**Grade 7**	**Grade 8**
Goal 5: Demonstrate understanding of career development and the skills required. *(continued)* **GLO 5.4:** Explore careers related to food and nutrition.			
5.5.4.1 Identify personal interests, aptitudes, skills, knowledge, and successes experienced in the food and nutrition classroom.	6.5.4.1 →	7.5.4.1 →	8.5.4.1 →
5.5.4.2 Describe the connection between interests and skills in food and nutrition education, at home and in the community, and skills required in the world of work.	6.5.4.2 →	7.5.4.2 →	8.5.4.2 →
5.5.4.3 Identify types of work that are available based on experiences in the food and nutrition classroom (e.g., marketing, hospitality, production, industry, technology, science, public health, and education).	6.5.4.3 →	7.5.4.3 →	8.5.4.3 →
5.5.4.4 Explain that career planning starts when interest and learning opportunities are available.	6.5.4.4 →	7.5.4.4 →	8.5.4.4 →

Middle Years Exploratory/Introductory		Middle Years Intermediate	
Grade 5	**Grade 6**	**Grade 7**	**Grade 8**
Goal 5: Demonstrate understanding of career development and the skills required. *(continued)* **GLO 5.4:** Explore careers related to food and nutrition. *(continued)*			
			8.5.4.5 Explore interests and discover opportunities to personalize an education path, making informed high school course selections, as well as informed post-secondary and employment decisions.

Middle Years Human Ecology

Appendices

Appendix 1: SLOs and GLOs from Other Subject Areas

Appendix 2: Safety in Middle Years Human Ecology Classroom Guidelines

Appendix 3: Elders in the Classroom

Appendix 1: SLOs and GLOs from Other Subject Areas

The following SLOs and GLOs from other subject areas are just a few examples of how the human ecology curriculum can be used to support, enhance, and connect with other curricula:

Science

5-1-01: Use appropriate vocabulary related to their investigations of human health. Include: nutrients; carbohydrates; proteins; fats; vitamins; minerals; Canada's Food Guide to Healthy Eating; food group; serving size; terms related to the digestive, skeletal, muscular, nervous, integumentary, respiratory, and circulatory systems. GLO: B3, C6, D1

5-1-02: Interpret nutritional information found on food labels.
Examples: ingredient proportions, identification of potential allergens, information related to energy content and nutrients…
GLO: B3, C4, C5, C8

5-1-03: Describe the types of nutrients in foods and their function in maintaining a healthy body. Include: carbohydrates, proteins, fats, vitamins, minerals.
GLO: B3, D1

7-0-2a: Access information using a variety of sources.
Examples: libraries, magazines, community resource people, outdoor experiences, videos, CD-ROMs, Internet…
GLO: C6 (ELA Grade 7, 3.2.2; TFS 2.2.1)

7-0-2b: Evaluate the usefulness, currency, and reliability of information, using predetermined criteria.
GLO: C6, C8 (ELA Grade 7, 3.2.3; TFS 2.2.2)

7-0-4c: Work cooperatively with team members to carry out a plan, and troubleshoot problems as they arise.
GLO: C7 (ELA Grade 7, 5.2.1)

7-0-4d: Assume various roles to achieve group goals.
GLO: C7 (ELA Grade 7, 5.2.2)

7-0-4e: Demonstrate work habits that ensure personal safety, the safety of others, and consideration for the environment. Include: keeping an uncluttered workspace; putting equipment away after use; handling glassware with care; wearing goggles when required; disposing of materials safely and responsibly.

7-0-5c: Select and use tools to observe, measure, and construct. Include: microscopes, a variety of thermometers, graduated cylinders, glassware, balance. GLO: C2, C3, C5

7-0-5d: Make conversions among commonly used SI units. GLO: C2, C3 (Math: SS-IV.3.6, SS-I.3.6, SS-III.3.6)

7-0-5e: Estimate and measure accurately using SI and other standard units. Include: determining volume by displacement of water. GLO: C2, C5 (Math: SS-IV.1.6, SS-III.1.5, SS-III.1.6, SS-I.1.5)

7-0-8b: Describe examples of how scientific knowledge has evolved in light of new evidence and the role of technology in this evolution. GLO: A2, A5, B

7-0-8g: Discuss societal, environmental, and economic impacts of scientific and technological endeavours. Include: local and global impacts. GLO: A1, B1, B3, B5

7-2-01: Use appropriate vocabulary related to their investigations of the particle theory of matter. Include: boiling and melting points, pure substance, scientific theory, particle theory of matter, temperature, heat, conduction, convection, radiation, mixture, solution, mechanical mixture, homogeneous, heterogeneous, solutes, solvents, solubility, concentration, dilute, concentrated, saturated, unsaturated, terms related to forms of energy. GLO: C6, D3, E4

7-2-07: Differentiate between the concept of temperature and the concept of heat. GLO: D3, D4, E4

Aboriginal Education

1.4.1: B-8: Use familiar text forms and media (e.g., recipes, comic strips, letters, radio or television reports) in own productions.

2.2.1: A-8: Divide an overall learning task into sub-tasks.

2.2.1: E-8: Identify and organize resources required for a specific learning task.

3.1.1: E-8: Suggest ways to help make decisions regarding the family budget.

3.1.1: F-8: Discuss family activities, gatherings, and special celebrations and traditions.

3.1.2: C-8: Identify changes that have occurred in the use of household products and technology over a specific time period.

3.1.2: G-2: Describe the usefulness of common household objects for specific tasks.

3.1.2: D-8: Analyze the benefits and disadvantages of the technology currently being used in homes

3.1.2: E-8 Discuss the importance of reducing, recycling, and reusing household items.

3.1.2: F-8: Discuss the use of energy-efficient practices (e.g., recycling, repairing rather than buying new products) in the home.

3.2.3: H-8: Describe ways in which technology has an impact on personal health (e.g., physical activity may increase with access to fitness equipment and decrease with prolonged use of technological devices).

3.2.3: I-8: Describe lifestyle practices (e.g., habits related to nutrition, stress management) and their effects on body systems (e.g., contribute to or prevent heart disease, depression).

Mathematics

5.N.2: Apply estimation strategies, including

- front-end rounding
- compensation
- compatible numbers

in problem-solving contexts. [C, CN, ME, PS, R, V]

5.N.4: Apply mental mathematics strategies for multiplication, such as

- annexing then adding zeros
- halving and doubling
- using the distributive property [C, ME, R]

5.N.7: Demonstrate an understanding of fractions by using concrete and pictorial representations to

- create sets of equivalent fractions
- compare fractions with like and unlike denominators [C, CN, PS, R, V]

5.N.9: Relate decimals to fractions (tenths, hundredths, thousandths). [CN, R, V]

5.N.10: Compare and order decimals (tenths, hundredths, thousandths) by using

- benchmarks
- place value
- equivalent decimals [CN, R, V]

8.N.3: Demonstrate an understanding of percents greater than or equal to 0%. [CN, PS, R, V]

8.N.4: Demonstrate an understanding of ratio and rate. [C, CN, V]

8.N.5: Solve problems that involve rates, ratios, and proportional reasoning. [C, CN, PS, R]

8.N.6: Demonstrate an understanding of multiplying and dividing positive fractions and mixed numbers, concretely, pictorially, and symbolically. [C, CN, ME, PS]

8.SP.1: Critique ways in which data are presented. [C, R, T, V]

Physical Education/Health Education

K.5.6.C.2: Identify daily nutrition habits and fluid intake practices to support healthy participation in various types of physical activities.

K.5.8.A.2: Examine lifestyle practices (e.g., physical activity habits, nutritional habits, use of tobacco and alcohol, rest habits, personal hygiene, stress management...) and their effects on body systems (e.g., contribute to or prevent coronary heart disease, diabetes, hypertension, cancer, osteoporosis, obesity, depression...).

K.5.8.C.1b: Explain influences (i.e., healthy eating, regular activity, media, healthy body image) on growth and development during adolescence.

K.5.8.C.2: Apply "sport nutrition principles" to a variety of physical activities.

S.5.6.A.3b: Use problem-solving strategies to improve personal nutrition and daily physical activity habits for a healthy body (e.g., bone development).

S.5.S2.A.3b: Demonstrate the ability to use information on labels to make daily healthy food choices.

Sustainability Life Practices (Acquiring—Middle Years)

Human Health & Well-Being

IM Demonstrate healthy behaviours

- make informed and healthy food choices by purchasing and eating healthy food and making appropriately sized lunches

2M Demonstrate safe behaviours

- carry out activities in a safe and responsible manner
- encourage others to act in a safe manner

3M Demonstrate care and concern for others—locally, nationally, and globally

- contribute to, or volunteer for, a worthwhile cause (e.g., a local shelter or soup kitchen)
- as a class or school, undertake a project to aid others locally, nationally, or globally (e.g., sponsor a foster child in a developing country)

The Environment

4M Demonstrate behaviours that contribute to the well-being of the environment, at home, school, and in the community

- establish a recycling program in their school

The Economy

5M Make wise choices about consumption

- precycle (i.e., refuse, reduce, replace, reuse in order to reduce consumption and recycling)
- purchase in a bulk or concentrated forms
- use clotheslines instead of dryers
- repair products to extend useful life instead of replacing them
- repair worn or torn clothing items instead of purchasing new items
- avoid purchasing products made with excessive packaging
- avoid buying products made from endangered plants and animals

6M Understand basic economic principles

- help set priorities and contribute to decision making regarding the family budget
- create and follow a personal budget
- begin to investigate career options
- shop and make purchases according to sustainability principles

Taking Action

7M Take action on sustainability issues

- analyze local and national sustainability issues
- as a class, identify and discuss a significant sustainability problem/issue

Social Studies

Skills

Active Democratic Citizenship

Students will…

S-100 Collaborate with others to establish and carry out group goals and responsibilities.

S-101 Use a variety of strategies to resolve conflicts peacefully and fairly.

S-102 Make decisions that reflect fairness and equality in their interactions with others.

S-103 Make decisions that reflect care, concern, and responsibility for the environment.

S-104 Negotiate constructively with others to build consensus and solve problems.

Managing Information and Ideas

Students will…

S-200 Select information from oral, visual, material, print, or electronic sources.

S-203 Select and use appropriate tools and technologies to accomplish tasks.

Managing Information and Ideas

Students will…

S-200 Select information from oral, visual, material, print, or electronic sources.

S-203 Select and use appropriate tools and technologies to accomplish tasks.

Critical and Creative Thinking

Students will…

S-301 Evaluate the advantages and disadvantages of solutions to a problem.

S-302 Draw conclusions based on research and evidence.

S 304 Distinguish fact from opinion and interpretation.

S-309 Interpret information and ideas in a variety of media.

Communication

S-400 Listen to others to understand their perspectives.

Values

6-VI-009 Appreciate the arts as important expressions of culture and identity.

Appendix 2: Safety in Middle Years Human Ecology Classroom Guidelines

Introduction

Hands-on activities are a fundamental part of human ecology learning. Teaching human ecology requires students' active involvement in developing safe and efficient behaviours for lifelong personal and job-related skills development. Students progress into skills-based courses, such as Middle Years Human Ecology. They are introduced to independent skills training where there is a natural increase in the complexity of their hands-on skills development. Over time, students learn techniques of job-related skills and, through repetition and practice, develop even more sophisticated skills such as critical thinking, inquiry, and problem solving. Hands-on lab activities can provide important connections in students' understanding of the nature of human ecology as it relates to lifelong learning, creativity, and the interplay of education and job-training skills.

The nature of the adolescent makes safety a very important issue. When adolescents are focused on the situation at hand, they may not consider the consequences or effects of current actions on the future. Adolescents often have a certain egocentrism that leads them to the belief that they are unique, special, and invulnerable to harm. They may be unaware of the consequences of risk-taking behaviour. It is the teacher's responsibility to ensure that safety considerations are accounted for when planning activities.

The challenge for schools is to offer human ecology activities that are simultaneously educationally rewarding and relevant to job training, making it challenging to students yet ultimately safe. These desired goals may be achieved through team effort involving all of those who set and administer school policies, design and maintain the learning environment, plan and deliver human ecology lessons, and select and prepare the materials used.

The goal of this appendix is to bring together information that principals, planners, teachers, and support staff need to help them make sound decisions regarding safety. It identifies areas for decision making and action at a variety of levels, and it supports planning and action by providing information on safety legislation and standards, safety hazards, and examples of procedures for eliminating or minimizing hazards.

1. Importance of a Safety and Health Program

What is the Internal Responsibility System for Safety and Health?

The *Workplace Safety and Health Act* supports every worker's right to a safe and healthy workplace. The duty for creating and maintaining a safe and healthy workplace falls on every person in the workplace to the degree that he or she has the authority and ability to do so. Whether it is the superintendent or the newest teacher hired, everyone has a

personal and shared responsibility for working together co-operatively to prevent workplace injuries and illness.

Because employers have the greatest degree of control over the workplace, they also have the greatest degree of legal responsibility for safety and health. This, however, does not relieve principals and teachers from their duty to participate and co-operate in controlling workplace hazards and to take the necessary precautions to protect themselves and others from hazards.

The act also recognizes that only workers who are adequately informed and empowered can effectively fulfill their responsibilities. It grants three important rights to workers:

- **The Right to Know** about workplace hazards, including how to identify hazards and protect themselves from those hazards, and about the rights afforded to workers under the act.
- **The Right to Participate** in decisions related to workplace safety and health, free of reprisal for their participation. Participation, in part, is achieved through the committee or workers' representative.
- **The Right to Refuse** work that the worker believes to be dangerous to him or herself or the safety of others.

The act protects the rights by prohibiting employers from imposing discipline or other sanctions on workers for fulfilling their responsibilities or exercising their rights. This helps workers participate with employers and supervisors in preventing workplace injuries and illness.

Taken together, these components are often called the internal responsibility system (IRS) for workplace safety and health, but good safety and health cannot rely on the internal responsibility system alone. Ongoing monitoring and enforcement by the Workplace Safety and Health Division are also required.

The combination of internal monitoring by Workplace Safety and Health Committees and external monitoring and enforcement by the Workplace Safety and Health Division ensure better legislative compliance and a more effective internal responsibility system in the workplace.

Due Diligence: An Approach to Human Ecology Safety

What is Due Diligence?

Sections 5, 6, and 7 of the act set out due diligence responsibilities. The act is available online at www.gov.mb.ca/labour/safety.

Due diligence means everyone with responsibility for safety and health must "….take every precaution reasonable in the circumstances to avoid a work related injury or illness." This concept of "reasonable care" holds individuals accountable for their acts (what they do) and omissions (what they fail to do). It goes beyond simple "regulatory compliance."

Due diligence contains these concepts:

- **Reasonably practicable:** What is "reasonably practicable" is determined by asking what a reasonable person, in the same position and circumstance, would have done to prevent the incident. When making that determination, three main factors need to be taken into account:
  - foreseeability
  - preventability
  - control
- **Degree of risk:** The approach selected to carry out a task depends on the degree of risk. The higher the risk, the greater the safety measures that must be taken.

In the case of a workplace safety and health program, the criteria for due diligence requires employers to do the following:

- **Establish a program:** The program should systematically identify hazards and assess their risks. It must include plans within the program to manage those risks. The plans should reduce the likelihood of the identified hazards causing harm.
- **Ensure the program is adequate:** The program must meet the needs of the workplace and the workers. It is a good idea to compare your program with industry standards.
- **Monitor and evaluate the program's effectiveness:** Competent staff must be able to regularly check the effectiveness of the program and judge how well it meets legislative requirements.

Understanding Negligence and Liability

Below is a segment from the *Administrative Handbook*, which includes a three-page section of reference on negligence and liability.

> It is generally assumed, in law, that teachers and others placed in charge of students have a duty to be responsible for the safety and welfare of those students during school hours and also after school hours during any school-sponsored activities on or off school premises. Failure to act reasonably under the circumstances, if this failure causes injury or death to a student, can result in a possible action in negligence.
>
> It is generally recognized that four conditions must exist for a negligence suit to be successful:
>
> 1. The person alleged to be negligent must have a legal duty to maintain a standard of conduct that will protect others against hazards.
> 2. This person must fail to conform to a reasonable standard of conduct in connection with this duty. (The accepted standard is that of a prudent parent of a large family. However at least one recent court decision made a clear departure from that standard, and adopted a higher "Professional" standard of care where a teacher needs specialized knowledge, training, and/or experience in order to carry out his/her duties, such as gymnastics instruction in a high school setting).
> 3. The person or persons to whom this obligation is owed must suffer a genuine loss or injury (which could be property loss or damage, or physical or psychological injury, or death).
> 4. There must be a definite causal connection between the first person's failure to maintain a proper standard of conduct and the loss or injury suffered by the second person.

Where teachers and other school officials are concerned, there is little difficulty in proving that a duty of care is owed to students. In any school activity, school personnel are generally assumed to be responsible, within responsible limits, for the welfare of students.

The fact that a mishap takes place does not automatically mean that there has been negligence. Genuine accidents do take place, and while they are unfortunate, no one can be blamed for them. Only if a court decides that a reasonably prudent person in the teacher's situation would have anticipated the mishap and would have acted to prevent it might the teacher be found negligent.

If students are to be placed in situations where the potential for injury exists, appropriate skill training and safety briefing must take place, and safety regulations conscientiously enforced. In addition, school officials are legally obligated to see that any facilities and equipment used are in safe condition.

Liability in Middle Years Human Ecology

The prudent teacher should ensure that every precaution against injury is taken. This should include periodic inspection of equipment, due concern for good discipline and safety practices, and proper supervision and competent teaching. The human ecology teacher should recognize potentially dangerous surroundings in instructional areas. Any potentially hazardous situations should be avoided. In order to reduce the possibility of injury, human ecology teachers should

- understand the safety element involved in each activity
- ensure a safe teaching environment
- use safe and tested equipment with which he or she is familiar
- understand the safety measures of learning activities specific to human ecology
- avoid the teaching of highly specialized or difficult techniques that are beyond the ability of students
- control/manage and organize students to avoid accident or injury

General Goals

The purpose of this safety and health document is to help teachers develop and operate a program that will prevent and control incidents. Such a program will protect students and increase the effectiveness of instructional methods and facility operations.

This document is also intended to provide our students and future workers with the skills, knowledge, and attitudes needed to keep them free and safe from injury now and later on the job.

The skills acquired through an effective program can be transferred to students' daily activities and personal choices. Positive attitudes must be developed through education, beginning at a young age and reinforced throughout daily activities and teachings. For safety and health education to be effective, it is important that it be viewed as an ongoing partnership among the school, home, community, and workplace, focusing on the following:

- Lessening the risk of injuries

- Evaluating potentially dangerous situations and being innovative in safely dealing with such concerns
- Understanding safety and health as an integral part of life
- Practising sound decision-making and preventative techniques
- Demonstrating critical-thinking and problem-solving skills that will allow them to solve health and safety problems
- Recognizing risks and hazards
- Recognizing and responding appropriately to emergency situations
- Possessing the knowledge, confidence, and initiative that will enable them to recognize and change behaviours and practices in their work environment
- Demonstrating the ability to influence and communicate effectively with colleagues and employers in working together to maintain a healthy and injury-free work environment
- Recognizing safety and health warning signs and symbols (e.g., WHMIS)

The elimination or reduction of incidents should be of primary concern to everyone in the school. A formal safety and health program will provide a means for teachers and students to accomplish safety and health objectives.

Establishing Program Outcomes

Establishing outcomes and policy to guide the safety and health program's development is critical to its design and organization. The first step is to establish the following:

1. Gaining and maintaining support for the program
2. Motivating, educating, and training those involved in the program to recognize and correct or report hazards located in the labs/facilities
3. Incorporating hazard control into the design
4. Providing a program of inspection and maintenance for machinery, equipment, tools, and facilities
5. Incorporating hazard control into school teaching and educational techniques and methods
6. Complying with established safety and health standards

Policy Statement

Once the objectives have been formulated, the second step is establishing the policy statement with the active participation of all those involved in the program's operation. The policy statement should reflect the following:

1. The importance the teacher places on the health and well-being of his or her students
2. The emphasis the school places on efficient operations with a minimum of incidents and losses
3. The intention of integrating hazard control
4. The necessity for active leadership, direct participation, and support from the entire school organization

5. The intent of the school administration to bring its facilities, operations, machinery, equipment, tools, et cetera, within the compliance of health and safety standards and regulations

The Need for Adequate Budget

There can be no compromise when it comes to the safety of our children. Principals, in collaboration with their teachers and safety and health committees, should define their safety and health program needs and allocate a sufficient level of resources to meet those needs, along with those allocations traditionally associated with the training and education process.

Responsibilities for the Safety and Health Program

Responsibility for the safety and health program can be established at the following levels:

1. School administration
2. Safety and health committees
3. Teachers
4. Support staff
5. Students
6. Parents

Responsibilities of School Administration

Before any safety and health program gets underway, it is essential that such a program receive support and commitment from school administration. The school board, superintendent, principal, and others concerned with administration and supervision must accept full responsibility for the safety and health program as it is established, furnish the drive to get the program started, and oversee its operations. Their responsibility is essential to the continuing obligation to carry out an effective safety and health program.

Furthermore, principals and supervisors must invite discussion with teachers and others in the program during pre-planning meetings and periodically throughout the school year. Such discussions may deal with program progress, specific needs, and a review of school safety and health procedures and alternatives for handling emergencies in the event of an incident. Specifically, responsibility at this level is to

- set objectives and policy
- ensure that the necessary information, facilities, tools, and equipment are available to conduct a safe program
- ensure sufficient funds are available for an effective safety budget
    - This would include providing continued EA support for students in need of adaptation or extra supervision for safe behaviour management, especially if support is already provided in other curricular areas.
- promote and support professional development regarding safety initiatives in human ecology

In consultation with the safety and health committee, the school principal must provide meaningful criteria to measure the success of the safety and health program and to provide information upon which to base future decisions.

Responsibilities of Teachers

Teachers have a professional responsibility to safeguard and educate those who have been placed under their supervision. Jointly with the principal, teachers are responsible for creating a safe and healthy instructional setting, integrating hazard identification, assessment of the risks, and control of the situation in all aspects of the facility.

For all practical purposes, the teachers are the eyes and ears of the facility control system. On a day-to-day basis, teachers must be aware of what is happening in their facilities, who is doing it, how various tasks are being performed, and under what conditions. They must be ready to change part of an operation or the entire operation if they perceive the immediate need for corrective action.

Human ecology teachers are to review school safety and health policies and regulations within their school/division. This may require teachers to have up-to-date training or certification in areas related to instruction, such as first aid and/or safe food handling certification courses.

The following are the primary safety and health responsibilities of teachers using human ecology facilities:

- To demonstrate and model safe work procedures

  Note: Teachers are role models to their students and should use exemplary behaviour in a human ecology classroom by demonstrating and modelling safe work procedures. Clean, appropriate clothing allowing unrestricted movement is recommended for all hands-on activities. Since there is the possibility of personal injury and food-borne illness, it is strongly recommended that teachers ensure that

  - inappropriate jewelry be removed
  - long hair be tied up/back
  - appropriate footwear be worn with adequate foot coverage (e.g., avoid flip-flops)
  - applicable protective equipment is used at all times
- To train and educate students in safe work methods and practices
- To actively participate in and support the school safety and health committees
- To supervise and evaluate student performance with consideration given to safe behaviour and work methods
- To monitor the facility on a daily basis for human, situational, and environmental factors capable of causing incidents
- To correct hazards detected while monitoring or to report such hazards to the persons who can take corrective action
- To investigate all incidents occurring within their labs/ facilities to determine the cause
- To ensure that hazard recognition and control information is included in each instructional module and administration session
- To develop a positive student safety attitude for school, home, social settings, and workplace activities

Responsibility of Support Staff

Support staff (e.g., educational or instructional assistants, student services, etc.) play a significant role in helping to create and maintain a safe and productive learning environment, especially in a human ecology course. They are at the forefront of designing specialized programming and are often privy to information that a human ecology teacher is not.

Support staff may provide a variety of supports, from aiding in the development of basic fundamental life skills to practising advanced behaviour management. Support staff may be addressing a diversity of needs for one student or caring for several students, collectively, with a huge variety of unrelated needs—especially students who are in need of adaptations to human ecology courses. Physical limitations or behavioural challenges may increase risk for potential accidents. Because support staff members are such an integral component to a safe experience for the student(s) in their charge, they should be ready to contribute to all forms of safety in a human ecology course.

In general terms, their responsibility might be to assist in the preparation of human ecology lab materials as requested by teachers for students with special needs to allow students with physical limitations to actively participate (e.g., assisting special needs students with safe setup and/or cleaning of tools and equipment; ensuring all students [special needs or not] who are under their direct care are safe and on task). However, their role may also include promoting and maintaining safety standards in the lab and classroom activities, and ensuring that all human ecology tools and equipment are in good condition.

The following are the primary safety and health responsibilities of support staff:

- To demonstrate and model safe work procedures as demonstrated or instructed by the human ecology teacher

  Note: Support staff, like teachers, are role models to their students and should use exemplary behaviour in a human ecology classroom by demonstrating and modelling safe work procedures. Clean, appropriate clothing allowing unrestricted movement is recommended for all hands-on activities. Since there is the possibility of personal injury and food-borne illness, it is strongly recommended that support staff ensure that

  - inappropriate jewelry be removed
  - long hair be tied up/back
  - appropriate footwear be worn with adequate foot coverage (e.g., avoid flip-flops)
  - applicable protective equipment is used at all times
- To demonstrate an active interest and to comply with school safety and health policies and regulations (as demonstrated or explained by the teacher)
- To monitor the facility for human, situational, and environmental factors capable of causing incidents to students with special needs (i.e., to educate students on the best ways to conduct safe work methods and practices)
- To correct hazards detected while monitoring or to report such hazards to the human ecology teacher, who can take corrective action

- To help maintain human ecology lab safety equipment during class time
- To ensure all human ecology equipment is in good working condition and to report equipment that needs repair or replacement
- To identify, document, and inform human ecology teachers of safety problems related to specific lab activities, and to recommend adaptations to activities when necessary to eliminate problems while still meeting curriculum goals
- To work with the human ecology teacher to promote safe procedures and maintain safety standards in all human ecology activities
- To communicate to the human ecology teacher any relevant information about students who are in need of course adaptations, preferably before the course begins

  Note: Students who are at risk of putting themselves or others in harm's way should be reported to the human ecology teacher before the course begins, as they may require increased awareness by the teacher and special course adaptation. When students have educational assistants (e.g., support for cognitive, behavioural, EAL needs) at their home school for regular class instruction, the home school should provide continued support in the human ecology classroom.

  At-risk conditions include, but are not limited to, any of the following:

  - Students who have medical (e.g., seizures, severe allergies resulting in anaphylactic shock), emotional, social, cognitive, or other conditions.
  - Students who have any allergies, sensitivities, and intolerances, especially those related to food products. These should be reported to the human ecology teacher before the course begins. This also includes any skin sensitivities (e.g., if a student is allergic to dish soap).
    - If the budget permits (or the student provides these items), appropriate ingredient substitutions and/or separate tools and equipment should be made available whenever possible. Appropriate care should be given to items that may need to be stored separately from normal classroom items (e.g., ingredients/tools for celiac disease).
  - EAL students
    - In extreme EAL cases, a translator or translating device (e.g., Google translate on a tablet) should be provided to both the teacher and the student to ensure accurate safety guidelines and expectations are clearly communicated and followed.

Responsibilities of Students

Everyone has the right to a safe human ecology experience, especially students. Students constitute the largest segment of the school population and are responsible for making good safety and health decisions. Students who actively participate in safety training help in preventing injury and equipment damage. Sequential skill development is essential for the safety of students. Readiness is achieved through competence in previous levels and ongoing evaluation is necessary, particularly in high-risk activities such as cutting and stove usage.

Students have the following responsibilities:

- To follow school safety and health rules and regulations and to work according to standard facility practices (as demonstrated and explained by the teacher)

  Note: Students should practise exemplary behaviour in a human ecology classroom, as instructed by the teacher. Clean, appropriate clothing allowing unrestricted movement is recommended for all hands-on activities. Since there is the possibility of personal injury and food-borne illness, it is strongly recommended that students ensure that

  - inappropriate jewelry be removed
  - long hair be tied up/back
  - appropriate footwear be worn with adequate foot coverage (e.g., avoid flip-flops)
  - applicable protective equipment is used at all times
- To interpret and demonstrate to the satisfaction of the teacher all safe operating procedures regarding materials, tools, mechanical, and personal safety
- To recognize and report to the teacher hazardous conditions or work practices
- To use PPE (personal protective equipment), safety equipment, tools, and machinery as they were designed.
- To report all injuries to the teacher
- To practise correct safety techniques, activity-specific behaviours, and etiquette, as demonstrated or explained by the teacher

Safety education should be an integral part of every instructional period and should be demonstrated in the lab area and when handling any tool or equipment.

Responsibilities of Maintenance

Those involved with the maintenance of equipment, machinery, and facilities play an important role in reducing incidents in the school lab/facility. The following are some of their responsibilities:

- To provide planned preventative maintenance on electrical systems, machinery, and equipment to prevent abnormal deterioration, loss of services, or safety and health hazards
- To provide for the timely collection and disposal of scrap materials and waste
- To ensure that equipment and facilities are of good quality and periodically safety-tested (Equipment designed to support student learning should be stable, secure, and supplied with appropriate accessories. Adequate and safe storage should be provided for all dangerous tools and equipment.)
  - Routine lab inspections (e.g., examining dishes to ensure they have been washed, dried, and stored properly; examining sewing machines and unplugging irons for safe storage, etc.) should be done before the end of every class.
    - Floors should be clean, smooth, and free of foreign objects.
    - Surfaces should be free of glass, cans, bottles, etc.

- Special care should be followed during the safe removal of broken dishes or shattered glass. For example, sharp objects should be wrapped in wads of paper before being discarded in the garbage for everyone's safety, including custodians.

The Role of the Workplace Safety and Health Committee

The role of the committee must not be confused with the responsibilities of principals or teachers. The committee brings together workers' in-depth practical knowledge of specific jobs and principal knowledge of the organization's "big picture" to provide input and advice on safety and health matters. The committee should also monitor the workplace safety system (as determined by the safety and health program) to ensure that it is working properly. The school division remains ultimately accountable for the final decision.

The committee should be used to assess the effectiveness of the workplace safety and health program. The committee may conduct a safety and health inspection.

Responsibilities of Parents

Parents are thought of as an important part of an effective human ecology/technology education safety and health program, as their support and understanding will help strengthen such a program. Parents complement the school effort by placing a strong value on safety and health while their children are at home, at work, involved in recreation, or being transported.

Their responsibilities include the following:

- To inform the school of health concerns that may affect their child's daily activities within the facility
- To be aware of the potential illness and injury their children are exposed to during their education and training
- To support the teacher and the principal when penalties must be assigned for violations of safety and health rules

2. Setting Up and Maintaining a Safe Human Ecology Facility

Achieving a Safe Facility

The intent of this section is to help the teacher achieve and maintain a safe facility.

Topics of this section include the following:

- Safety and health inspections
- Personal protective equipment
- Hazard analysis
- Incident investigation techniques

Safety and Health Inspections

Purpose

To provide the teacher with an understanding of the inspection process and the ability to carry out an effective safety and health inspection. This section will cover the following:

1. The purpose of inspections
2. The types of inspections
3. The persons involved in the inspection process
4. Techniques
5. Methods of recording

Introduction

Safety and health inspections are an important part of the hazard control process. Regular inspections play an important part in providing a safe environment for our students.

Mandatory Inspections

Every school facility and each of its processes and operations contain potential hazards, which come about through normal use or through changes and additions of new equipment. One way of keeping aware of hazards is through continuous inspections.

Purpose of Inspection

- To spot potential hazards before an incident occurs
- To assess the hazard
- To find improvements and corrections to improve overall operations and increase effectiveness
- To do all of the above, every day

Inspections may be classified as periodic or continuous.

Types of Inspection

Periodic Inspection

A safety and health inspection is thorough and systematic. These inspections can be conducted monthly or bi-monthly. This type of inspection covers all areas (e.g., operations, equipment, etc.).

Continuous Inspection

Continuous inspections should be conducted by students, teachers, support staff, department heads, or supervisors as part of their instructional, supervisory, or assigned duties. Continuous inspections provide an immediate chance to examine and, if necessary, to correct or to report any unsafe situations (if correction is not possible).

Who Should Make Inspections?

Teachers

Teachers must make continuous inspections and be aware of changing conditions, operations, and work methods. These inspections may have to be made several times a day (i.e., at the beginning of each day and, for certain equipment, at the beginning of each class).

Support Staff

Support staff must make preliminary inspections during their time in a human ecology classroom and lab. These inspections may have to be made several times throughout class time (i.e., during the setup, handling, and storage of tools and equipment; continuous behavioural and hygienic management).

Students

Student inspections allow students to take a major role in their lab/facility, thus giving them a sense of ownership of their lab/facility.

Department Head or Supervisors

A school/school division that has a department head or supervisor for human ecology has a further advantage in safety and health inspections. The department head or supervisor may record any unsafe conditions and practices and forward the information to the teacher and/or maintenance personnel if required.

Inspection Procedures

An inspection program requires that those conducting the inspections have

- a sound knowledge of the facility
- a systematic inspection process for the facility
- a method of reporting, evaluating, and using the data gathered

What Should Be Inspected?

When inspecting, the following should be considered:

- **Materials and substances:** Inspect those materials and substances that may cause injury, illness, fire, or other hazards.
- **Equipment and tools:** Ensure that they are free of defects and other hazards.
- **Personal protective and safety equipment:** Ensure that there is adequate protection for all students involved and that the equipment is in good shape (i.e., oven mitts, presser foot on sewing machine is securely in place, etc.).
- **Working and walking surfaces:** Areas must be clean and functionally safe.
- **Environmental factors:** Ensure lighting and ventilation (e.g., fans in a foods lab) are in place.
- **Housekeeping:** Material storage, waste disposal, floor, and counters should be neat and tidy.
- **First-aid kit:** Ensure the first-aid kit is stocked with adequate supplies and in plain sight.
- **Electrical:** Switches, breakers, fuses, cords, and plugs must be in compliance with regulations.
- **Chemical storage, handling, and use:** Ensure that materials (e.g., cleaning supplies with bleach) are stored properly.
- **Fire protection and extinguishing systems:** Fire blanket, fire exit doors, exit signs, etc., must be in good order and in working condition.

- **Preventative maintenance:** The teachers' consistent preventative maintenance in the lab/facility and with tools will help to ensure incident prevention and student safety.

Hazardous Equipment

In the process of inspection, various actions or corrections may have to take place. When a broken or damaged tool is found, the teacher should immediately remove it. Large equipment, however, may have to be properly tagged. The teacher may also need to perform an electrical lockout by placing a mini-padlock through one of the tines of the power cord plug to prevent unauthorized use of the tool (e.g., an electric mixer that has parts that jam).

Summary

Acting on the information gathered from an inspection is as important as conducting the inspection in the first place. It is necessary that the inspection team brings problems and recommendations for corrective action to the attention of those involved (i.e., teacher, principal, or workplace safety and health committee). Based on problems uncovered and recommendations by Workplace Safety and Health, they must decide on the best course of action.

Information from inspections should never be seen as fault-finding and criticism, but rather as fact-finding with an emphasis on locating potential hazards that may have an adverse effect on the safety of the operation. The information should be viewed as the basis for establishing priorities and implementing programs that will improve conditions to provide a safe environment for our students.

Personal Protection Equipment Requirements (PPE)

Education

Unless students are educated in the use and care of PPE, it may do little to fulfill its intended purpose. It is recommended that human ecology teachers instruct safety and be a role model for working safely at all times, which includes the use of protective clothing and equipment.

Head Protection

There is always a danger of hair becoming entangled in moving parts (e.g., electric mixer or embroidery machine that doesn't require the foot being on the foot control at all times) or dangling into food (hygiene safety). Students with long hair should have their hair tied back, secured, or tucked underneath their clothing.

Hand Protection

The hazards in the human ecology facilities include burns, scalds, cuts, etc. The use of heat protection, like oven mitts, is good work practice to prevent hand injuries during handling of hot tools and materials.

Foot and Leg Protection

Students may require protection from the hazards of broken shards of dishes or glasses, splashes of hot liquids, and mishandled cutting tools like knives and fabric scissors. Personal protective footwear in a human ecology lab may include footwear that has adequate foot coverage. This can protect feet against injuries, such as those from falling knives, hot spills, or irons that accidentally topple over.

Hazard Analysis

The benefit of hazard analysis is to increase the awareness of potential hazards.

Incident Investigation Techniques

The goal of facility operations hazard analysis is to identify and evaluate hazards in the facility before they result in incidents. The concept behind this is sound, however, there may be times when we will not be able to find and eliminate problems before incidents occur. When an incident occurs, we must be prepared to acquire through investigation as much information as possible about the cause so that similar incidents can be avoided.

Reasons for Investigation

Teachers should become familiar with school/school division policies regarding incident investigation. The following are important reasons for investigating incidents:

- To determine the cause of the incident
- To find out ways to prevent further similar incidents
- To uncover and reduce indirect incident causes

Fact-Finding not Fault-Finding

Remember, incident investigation is fact-finding rather than fault-finding. The intent of the investigation is to find the cause and/or reason of the error/defect and make the necessary corrections so further incidents can be avoided.

Investigation by the Teacher

The teacher is the best one to do the investigation. The teacher is the one who was in the room at the time of the incident. The teacher is

- familiar with the students, their abilities, and their personal characteristics
- aware of the equipment, tools, and operations

Key Points for Interviewing

When investigating an incident, the following key points are important:

- Conduct the interview as soon as possible.
- Interview one person at a time.
- Explain the purpose of the investigation.
- Make the witnesses feel at ease.
- Be diplomatic in your task.
- Keep the questions simple.
- Avoid leading questions.
- Allow students to explain in their own words, uninterrupted, their story of the situation.
- Review the information given.
- Allow students to explain how the same incident can be prevented in the future.

For more information, see the Manitoba Education and Training documents *Keeping Your Facilities SAFE: A Support Document for Industrial Arts Teachers* (available online at www.edu.gov.mb.ca/k12/docs/support/ia_safe/) and *Science and Safety: A Kindergarten to Grade 12 Resource Manual for Teachers, Schools, and School Divisions* (available online at www.edu.gov.mb.ca/k12/docs/support/scisafe/index.html).

Appendix 3: Elders in the Classroom*

It is the Elders' responsibility to guard sacred knowledge and to maintain the ceremonial oral tradition of knowledge transmission. The Elders bring with them traditional knowledge and perspectives passed down from generation to generation through the oral tradition. The reference to Elders' wisdom has lately been termed Indigenous knowledge or traditional knowledge. Their traditional knowledge and wisdom will give insight to teachers willing to reshape curriculum, validating First Nations, Métis, and Inuit content and perspectives.

Elder Expectation

When you invite Elders, it is important that you are clear on what you expect from them. If you are asking them to contribute with their knowledge, wisdom, and guidance, then say so. Some Elders may not be familiar with what teachers and curriculum writers are trying to do, so explaining what is required of them is essential to a good working relationship. You want them to contribute First Nations, Métis, or Inuit content and perspectives. The Elders need to feel confident that they will be of assistance. Let them know that you see their role as wisdom keepers and they need to draw upon their personal experience, cultural knowledge, and teachings to contribute to the process. The Elders will share what is acceptable and give caution for what they view as sacred knowledge that is only to be shared in the context of ceremony.

Elders need time to think before they answer. Do not be impatient and feel they are not answering soon enough, as they will answer your questions in time. Some Elders are reflective, philosophical thinkers. They will review holistically what you have asked of them. A concept that you think is simple and straightforward has many different dimensions to First Nations speakers, and they must put the concept into the context of the whole and analyze the dimension of its interrelatedness. Sometimes they translate what you are saying to themselves in their language. They think things out in their mother tongue first and then find the words of closest approximation in English. Not all words and concepts are readily translatable. That is why letting the Elders know what is expected of them beforehand is important because it gives them time to think it over and to find some area of common ground.

Protocol for Inviting Elders

Please note that there are Elders for each of the Aboriginal groups (five distinct language groups of First Nations in Manitoba, Métis, and Inuit). It is important to identify each of the separate Aboriginal groups—First Nations, Métis, and Inuit—and their respective protocols.

* Source: King, Anna-Leah. "Elders in the Classroom." Adapted with permission of the author. Available as appendices to the resources on the following website: Saskatchewan Teachers' Federation."Unit Plans: Science—Secondary Level." Stewart Resources Center. https://www.stf.sk.ca/portal.jsp?Sy3uQUnbK9L2RmSZs02CjV/LfyjbyjsxssfEZJZhE4gE=F (18 Feb. 2015).

Elders need to be approached in a respectful and traditional way, with consideration for the diversity of belief systems held by individual Elders. Each First Nation has its own protocol and it is important to seek guidance from people who know the Elder you wish to invite. One way of addressing the issue is to allow Elders to take tobacco from a bowl or a pouch of tobacco. In this way the person can accept or decline the tobacco and everyone is respected. Gifts are appropriate for those Elders who do not accept tobacco, and honoraria are used to indicate their service is valued (Manitoba First Nations Education Resource Centre).

Elders can be asked to lead the gatherings with prayer and ceremony. First Nations gatherings always begin with prayer and ceremony. It is entirely appropriate to ask this of them. It may not be what you are familiar with, but you will soon realize the benefits of respecting First Nations protocol and ceremonial practice. The Elders may want to begin with a smudge on the first gathering and offer prayer for the task at hand and the team that has been brought together. The Elders are well aware that any given group put together is there to learn from one another and so blessings towards this endeavour are prayed for. Sometimes, depending on the size of the project, a pipe ceremony may be requested. Each Elder may have a slightly different approach to opening and closing a ceremony. Some may speak for a while. Others will ask you to share so they can become more familiar with everyone. The Elder will take it from there.

Elder Care

Elders do not expect anything, but it would be nice to assign one person to see to their needs. Offer them a comfortable seat and debrief them on the expectations for the gathering. Introduce them to everyone and generally make them feel welcome. See to it that they have water, juice, coffee, or tea. It is good to have a snack for them at coffee break. Invite them to pray over the food before you eat. Allow them to be first in line for lunch or let them know you will serve them. This is an example of First Nations protocol. These are small things, but kind gestures go a long way with Elders. They appreciate when younger people make efforts to lighten their load. These gestures make the Elders feel welcome and cared for in a respectful way.

Gifts

It is appropriate to have a gift of appreciation for the Elders. Even when Elders are paid for their time through an honorarium, some teachers also provide a small gift, such as a basket of teas or jams.

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