

21st Century Learning 20L

Locally Developed Course

Saskatchewan Rivers School Division

What we're really trying to do is...
prepare students to live in a world
of constant change. - Ken Kay

The illiterate of the 21st Century are
not those that cannot read or write,
but those that cannot learn, unlearn,
and relearn. - Alvin Toffler

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Introduction

In today's environment, students need more than thinking skills and content knowledge in order to be successful in life and work (Kay & Greenhill, 20L13). Knowledge, skills and technologies are changing at a rapid pace and the skills our students need to be successful in are directly related to the processes of critical thinking and problem solving, communication, collaboration, creativity and innovation. Students need to be fluid thinkers who have the confidence to not only take on, but embrace challenge and change. This course, while providing students with 21st Century skills and literacies, will focus on the processes that will enable all students to be successful, engaged citizens beyond the classroom doors. Students will be engaged in authentic learning experiences that are connected to real world outcomes so that they are set up for success after graduation.

This curriculum provides the learning outcomes that 21st Century Learning 20L students are expected to achieve by the end of the course. Indicators are included to provide the breadth and depth of what students should understand, know, and be able to do in order to achieve the identified learning outcomes. Completion of all indicators for this course will ensure 20L outcomes are met.

Broad Areas of Learning

There are three Broad Areas of Learning that reflect Saskatchewan's Goals of Education. 21st Century Learning 20L contributes to the Goals of Education through helping students achieve understandings, skills, and attitudes related to the following:

Lifelong Learners

Students who are engaged in constructing and applying 21st Century knowledge and literacies will build a positive disposition towards learning (CED 6). Throughout 21st Century Learning 20L students demonstrate understandings, abilities, and dispositions necessary to learn about 21st Century Learning and to apply these learnings in various settings. Applying these new understandings within a variety of contexts supports students as they create their life and work plan.

Sense of Self, Community, and Place

In 21st Century Learning 20L, students learn through partnerships they can create a stronger community on the local and global level. Through collaborative work students will see the contributions they are able to make in their communities as a collective. Self-reflection will help students identify their strengths, and the positive relationships they are able to build within their communities.

Engaged Citizens

21st Century Learning 20L focuses on the literacies essential to life and work, including global awareness, environmental literacy and service learning. Students will be exposed to literacies that contribute to a student's career plans. Students who build a capacity for active involvement, an ethical sense of personal agency, and connections to the well-being of self, family, community, and the environment will contribute to the sustainability of local and global communities.

Cross-curricular Competencies

The Cross-curricular Competencies are four interrelated areas containing understandings, values, skills, and processes which are considered important for learning in all areas of study. These competencies are reflective of the Common Essential Learnings and are intended to be addressed in each area of study at each grade level.

Developing Thinking

Learners construct knowledge to make sense of the world around them. Understanding develops by building on what is already known, and by initiating and engaging in contextual thinking, creative thinking, and critical reasoning through cultural, experiential, and inquiry processes. 21st Century Learning 20L is inquiry-based and recognizes the knowledge and abilities that students already possess. Students learn to self-reflect and purposefully seek, evaluate, and apply 21st century skills to the literacies.

Developing Identity and Interdependence

This competency addresses the ability to act autonomously in an interdependent world. It requires the learner to develop an awareness of the environment, of social and cultural expectations, and of the possibilities for individual and group cohesiveness. It assumes the possession of a positive self-concept and the ability to live in harmony with others and with the natural and constructed worlds. Achieving this competency requires understanding, valuing, and caring for oneself; understanding, valuing, and respecting human diversity and human rights and responsibilities; and understanding and valuing social and environmental interdependence and sustainability.

Developing Literacies

This competency addresses a variety of ways, including using knowledge and technology, to interpret the world and express understanding of it. Multiple literacies involve the evolution of interrelated skills, strategies, and knowledge that contribute to the development of an individual's ability to participate in attaining and maintaining balance in the home, school, and community. 21st Century Learning 20L requires students to use different literacies, including financial, civic, health, environmental, media, technological, and entrepreneurial literacy. (Appendix D)

K-12 Goals:

- Constructing knowledge related to various literacies
- Exploring and interpreting the world through various literacies
- Expressing understanding and communicating meaning through various literacies

Developing Social Responsibility

This competency addresses how people contribute positively to their physical, social, and cultural environments. It requires an awareness of unique gifts and challenges among individuals and communities and the ability to collaborate with others.

21st Century Skills

For many students, there are significant gaps between the knowledge and skills required to graduate, and the knowledge and skills needed to be successful in post-secondary education, the work force and adult life.(Kay and Greenhill, 2013) In the 21st century, students need to be able to “look at material they have never seen before and know what to do with it.”(Kay and Greenhill, 2013 pg 9) They need to learn the core content while mastering the skills needed for education, work and life. This curriculum will focus on the skills deemed a **priority** for learning and working in the 21st century : communication, collaboration, critical thinking and creativity or the 4Cs. (Kay and Greenhill, 2013 pg 11)

- Critical Thinking and Problem Solving**, e.g., effectively analyze and evaluate evidence, arguments, claims and beliefs; solve different kinds of non-familiar problems in both conventional and innovative ways.
- Communication**, e.g., articulate thoughts and ideas effectively using oral and written communication skills in a variety of forms and contexts.
- Collaboration**, e.g., demonstrate ability to work effectively and respectfully with diverse teams.
- Creativity and Innovation**, e.g., use a wide range of idea creation techniques to create new and worthwhile ideas.

Note: Definitions and explanations of critical thinking, communication, collaboration, creativity and innovation, and various literacies have been adapted from 21st Century Knowledge and Skills in Educator Preparation (2010).

Safety

Safety is always job one. Safety as it relates to this 21st century skill development course is no less important. Safety should always be a part of the planning process and the delivery of any activity. One of the benefits of this course is the use of mini challenges, projects, and community involvement. However with these benefits comes a variety of safety needs. These will vary with the types of activities, challenges, and tasks. Teachers should make themselves aware of any required PPE (personal protective equipment) for chosen activities. This could include but not be limited to safety glasses, hearing protection, footwear, and proper ventilation. Personal safety when working in the community presents its own safety needs. All projects and challenges should be thoroughly reviewed to identify safety precautions required. School administration and your occupational safety committee are good resources when reviewing safety needs.

Aim and Goals of 21st Century

Aim

The aim of 21st Century Learning 20L is to develop empathetic, caring citizens who are engaged and responsible for their learning. They are able to apply 21st century skills in all areas of everyday life.

This course compliments the Leadership 30 locally developed course.

Goals

Goals are broad statements identifying what students are expected to know and be able to do upon completion of study in a particular subject area. Our course prepares students for the achievement of 21st Century Learning 20L goals.

Goal # 1 – Students will explore their self- awareness and their connections between their own 21st century skills and values and that of others and understand how it applies to everyday life. (SA)

- Critical Thinking and Problem Solving**, e.g., effectively analyze and evaluate evidence, arguments, claims and beliefs; solve different kinds of non-familiar problems in both conventional and innovative ways.
- Communication**, e.g., articulate thoughts and ideas effectively using oral and written communication skills in a variety of forms and contexts.
- Collaboration**, e.g., demonstrate ability to work effectively and respectfully with diverse teams.
- Creativity and Innovation**, e.g., use a wide range of idea creation techniques to create new and worthwhile ideas.

Goal #2- Students will expand their critical thinking; communication; collaboration; and creativity and innovation skills to seek out solutions to challenges through the 21st century literacies. (LIT)

Goal #3- Students will apply acquired 21st century skills that will enable them to have an impact, as they engage themselves as active members of their classroom, school, and community. (AAC)

Career Development Competencies

21st Century Skills 20L offers many avenues to career development as well as networking opportunities with local, provincial, national, international businesses and organizations. 21st Century Skills 20L focuses heavily on the development of the the four C's: communication, collaboration, creativity, and critical thinking. These four C's link directly to many parts of Blueprint for life/Work designs. Communication and collaboration link directly to building a positive self-image, interacting positively and effectively with others. Critical thinking skills are paramount to making good decisions, and relate to securing/creating and maintaining work, making life work enhancing decisions, as well as many other

areas of the Blueprint for life/Work designs framework. 21st Century Skills 20L also encourages partnerships with business and organizations at all levels. These partnerships provide excellent opportunities for students to network with a wide range of people, thus providing insight into the world of work and aid in decision making/career planning. Many of these partnerships will also give an in depth look into the risks and rewards of entrepreneurship.

Developing Partnerships

Developing partnerships for learning opportunities within one's community is vital to the student's success in 21st Century Learning 20L. Schools and students need to establish connections within the community in order to facilitate a solid understanding of the 21st century demands faced by the community as well as those students will encounter in their post-secondary education, life and work.

Strong partnerships are also essential to students as they require a community connection to assist with the editing and completion of the challenge proposed in the outcomes in goal #3.

Constructing Understanding through Inquiry

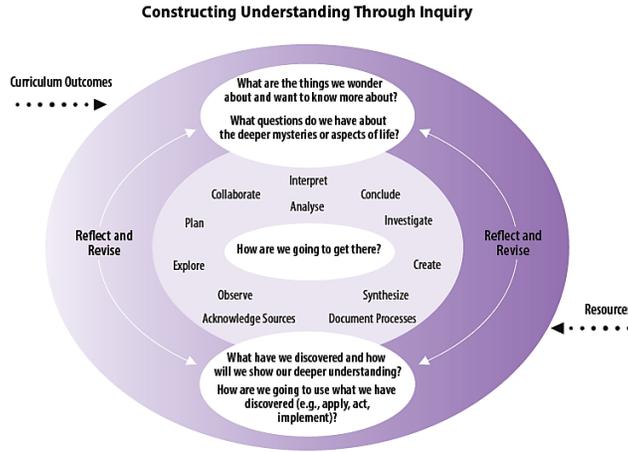
Inquiry learning provides students with opportunities to build knowledge, abilities, and inquiring habits of mind that lead to deeper understanding of their world and human experience. Inquiry focuses on the development of compelling questions, challenging opportunities, and personal application, to motivate and guide inquiries into concepts and issues related to curriculum content and outcomes.

Inquiry builds on students' inherent sense of curiosity and wonder, drawing on their diverse backgrounds, interests, and experiences. It provides opportunities for students to become active participants in a collaborative search for meaning, understanding, and change. While memorizing facts and information may be necessary in some cases, it is not sufficient. What is important in 21st Century Learning 20L is understanding how to access, make sense of, and apply the reliable information related to the 4Cs and the literacies. Students need to move toward the generation of useful and applicable knowledge - a process supported by inquiry learning. Inquiry learning is not a step-by-step process, but rather a cyclical process, with various phases of the process being revisited and rethought as a result of students' discoveries, insights, and co-construction of new knowledge.

Students who are engaged in inquiry:

- construct deep knowledge and deep understanding rather than passively receiving information;
- are directly involved and engaged in the discovery of new knowledge;
- encounter alternative perspectives and differing ideas that transform prior knowledge and experience into deep understandings;
- transfer new knowledge and skills to new circumstances; and
- take ownership and responsibility for their ongoing learning and mastery of curriculum content and skills.

(Adapted from Kuhlthau & Todd, 2007)



Outcomes and Indicators

Goal # 1 – Students will explore their self- awareness and their connections between their own 21st Century Skills and values and that of others and understand how it applies to everyday life. (SA)

SA1.1 Explore critical thinking; communication; collaboration; and creativity and innovation skills.

- a. Define and provide examples of critical thinking; communication; collaboration; and creativity and innovation skills.
- b. Identify the advantages of critical thinking; communication; collaboration; and creativity and innovation skills.
- c. Demonstrate effective applications for critical thinking; communication; collaboration; and creativity and innovation skills.
- d. Investigate what type of skills individuals and groups use to solve everyday challenges.
- e. Distinguish when it may be more appropriate to use one skill over the other.

SA 1.2 Compare traditional (including First Nations and Metis) and contemporary critical thinking; communication; collaboration; and creativity and innovation skills.

- a. Employ appropriate and increasingly sophisticated strategies (including technology) to gather, interpret, and evaluate skills (e.g., interview community leaders, traditional knowledge keepers, role models, etc.), evaluate source of information, reflect on personal biases, discuss alternative perspectives.
- b. Analyze and communicate skills in terms of their interconnectedness (i.e., connections), interdependence (i.e., mutual benefits), and interactions (i.e., effects of one on another).
- c. Investigate the multitude of factors that exert influences skills (e.g., relationships, gender, culture, traditions, socio-economic factors, technology use).
- d. Critique community and societal norms (e.g., expectations regarding gender roles, norms

- regarding work ethic, value of alternative ways of learning) that influence the balance of skills.
- e. Assess one's motivations (e.g., internal vs external) and limitations (e.g., time management, access to resources) that improve and/or impede one's skills.

SA 1.3 Assess and reflect on the impact of critical thinking; communication; collaboration; and creativity and innovation skills on overall well-being of self, group, and community.

- a. Take a skills style inventory to assess personal strengths and weaknesses. ([Skills Style Inventory Example](#), www.myBlueprint.ca)
- b. Evaluate, revise, and continue to implement a Personal Plan for skill development based on new understandings.
- c. Demonstrates cooperation as a member of a successful group, interacts smoothly with others, and works together to achieve a goal.
- d. Demonstrate an awareness of and sensitivity to cultural differences including First Nations, Metis, and those of the local community (e.g., values, norms, beliefs, language, history).
- e. Analyze, explain, and apply understandings, skills, and strategies that enhance confidence and competence in participating in individual and group challenges.

Goal #2- Students will expand their critical thinking; communication; collaboration; and creativity and innovation skills to seek out solutions to challenges through the 21st century literacies. (LIT)

LIT2.1 Analyze and express one's own understanding of how ethics influences critical thinking; communication; collaboration; and creativity and innovation skills.

- a. Examine one's own values about appropriate behavior.
- b. Brainstorm and research definitions of ethics, etiquette, and empathy.
- c. Investigate examples of ethical and unethical behaviors in various situations.
- d. Assess the impact of ethical behaviour on change.

LIT2.2 Develop and demonstrate 21st century skills necessary to enhance and promote financial literacy.

- a. Brainstorm examples of the 4Cs as they relate to financial literacy (e.g., knowing how to make economic choices, understanding the role of the economy in society.)
- b. Analyze financial case studies, videos, or articles to identify common characteristics and draw conclusions about effective solutions.
- c. Investigate cultural perspectives, including First Nations and Metis, as they relate to financial literacy in the past, present, or future (e.g. What is wealth? How do your wants/needs impact financial planning? What was the spirit and intent of resource sharing in the Treaties?)
- d. Interview (using various forms including face to face, video conferencing, panel discussion, Q&A presentation, etc.) individuals to clarify and extend thinking to assist in becoming financially literate.
- e. Complete a DI inspired challenge that relates to financial literacy using a variety of tools, including technology, to research, organize, evaluate and communicate information.

- f. Consider how individual skills were applied to the challenge(s) and assess and reflect on the group's processes.

LIT2.3 Develop and demonstrate 21st century skills necessary to enhance and promote civic literacy.

- a. Brainstorm examples of the 4Cs as they relate to civic literacy (e.g., participating effectively in civic life; exercising the rights and obligations of citizenship).
- b. Analyze civic case studies, videos, or articles to identify common characteristics and draw conclusions about effective solutions.
- c. Investigate civic issues affecting the local community (e.g. Is housing affordable and available for new residents? Does everyone have access to public facilities? What waste regulations are needed for the city?)
- d. Interview (using various forms including face to face, video conferencing, panel discussion, Q&A presentation, etc.) individuals to clarify and extend thinking to assist in becoming civically literate.
- e. Complete a DI inspired challenge that relates to civic literacy using a variety of tools, including technology, to research, organize, evaluate and communicate information.
- f. Consider how individual skills were applied to the challenge(s) and assess and reflect on the group's processes.

LIT2.4 Develop and demonstrate 21st century skills necessary to enhance and promote health literacy.

- a. Brainstorm examples of the 4Cs as they relate to health literacy (e.g., obtaining, interpreting and understanding basic health information and services; understanding preventive physical and mental health measures).
- b. Analyze health related case studies, videos, or articles to identify common characteristics and draw conclusions about effective solutions.
- c. Investigate cultural perspectives, including First Nations and Metis, as they relate to health in the past, present, or future (e.g. What role does traditional and holistic medicine have in society? What are various attitudes towards mental health? How could the medicine wheel model impact your life in a positive way?)
- d. Interview (using various forms including face to face, video conferencing, panel discussion, Q&A presentation, etc.) individuals to clarify and extend thinking to assist in becoming health minded
- e. Complete a DI inspired challenge that relates to health based literacy using a variety of tools, including technology, to research, organize, evaluate and communicate information.
- f. Consider how individual skills were applied to the challenge(s) and assess and reflect on the group's processes.

LIT2.5 Develop and demonstrate 21st century skills necessary to enhance and promote environmental literacy.

- a. Brainstorm examples of the 4Cs as they relate to environmental literacy (e.g., demonstrating

knowledge and understanding of the environment and the circumstances and conditions affecting it; taking individual and collective action towards addressing environmental challenges).

- b. Analyze environmental case studies, videos, or articles and draw conclusions about effective solutions.
- c. Investigate cultural perspectives, including First Nations and Metis, as they relate to environmental literacy in the past, present, or future (e.g. How do various cultures celebrate the land? What are traditional views of stewardship? What might future resource sharing look like?)
- d. Interview (using various forms including face to face, video conferencing, panel discussion, Q&A presentation, etc.) individuals to clarify and extend thinking to assist in becoming environmentally literate.
- e. Complete a DI inspired challenge that relates to environmental literacy using a variety of tools, including technology, to research, organize, evaluate and communicate information.
- f. Consider how individual skills were applied to the challenge(s) and assess and reflect on the group's processes.

LIT2.6 Develop and demonstrate 21st century skills necessary to enhance and promote media literacy.

- a. Brainstorm examples of the 4Cs as they relate to media literacy (e.g., understand both how and why media messages are constructed; create media products by understanding and utilizing the most appropriate media creation tools, characteristics and conventions).
- b. Analyze environmental case studies, videos, or articles and draw conclusions about effective solutions.
- c. Investigate cultural perspectives, including First Nations and Metis, as they relate to media literacy in the past, present, or future (e.g. How has media negatively influenced a culture? When have historic descriptions/terminology used by the media created stereotypes? What would you change about current media practices?)
- d. Interview (using various forms including face to face, video conferencing, panel discussion, Q&A presentation, etc.) individuals to clarify and extend thinking to assist in becoming media literate.
- e. Complete a challenge involving the creation and production of a media message (ie. message from school to local community) using a variety of tools, including technology, to research, organize, evaluate and communicate information.
- f. Consider how individual skills were applied to the challenge(s) and assess and reflect on the group's processes.

LIT2.7 Develop and demonstrate 21st century skills necessary to enhance and promote entrepreneurial literacy.

- a. Brainstorm examples of the 4Cs as they relate to entrepreneurial literacy (e.g., Using entrepreneurial skills to enhance workplace productivity and career options).
- b. Analyze entrepreneurial case studies, videos, or articles to identify common characteristics and

draw conclusions about effective solutions.

- c. Investigate cultural perspectives, including First Nations and Metis, as they relate to entrepreneurial literacy in the past, present, or future (e.g. How did the industrial revolution impact entrepreneurship? How did globalization create entrepreneurial opportunities such as the fur trade? How do equal opportunity initiatives support previously marginalized groups? ie. aboriginal grants)
- d. Interview (using various forms including face to face, video conferencing, panel discussion, Q&A presentation, etc.) individuals to clarify and extend thinking to assist in becoming an entrepreneur.
- e. Complete a DI inspired challenge that relates to entrepreneurial literacy using a variety of tools, including technology, to research, organize, evaluate and communicate information. Create, compute, and communicate using a variety of materials, strategies, and technologies that express understanding and experiences of an entrepreneurial based challenge. Create, compute, and communicate using a variety of materials, strategies, and technologies.
- f. Consider how individual skills were applied to the challenge(s) and assess and reflect on the group's processes.

Goal #3- Students will apply acquired 21st century skills that will enable them to have an impact, as they engage themselves as active members of their classroom, school, and community. (AAC)

AAC 3.1 Apply 21st century skills through participation in a student-directed challenge that involves one or more literacies (financial, civic, health, environmental, media, entrepreneurial).

- a. Create a project goal through posing questions and possible solutions to the challenges your classroom, school, or community faces.
- b. Identify the needed resources, skills, timelines, and safety practices required to achieve the project goal.
- c. Engage in partnerships, including stakeholders outside of the institution (e.g., community leaders, business leaders, professional associations, local educational organizations) or other stakeholders, to help contribute to the development of the project.
- d. Present the project summary.

AAC 3.2 Assess and reflect on the student directed challenge that involved one literacies (financial, civic, health, environmental, media, entrepreneurial).

- a. Assess individual and collective questions, issues, and/or concerns related to the project and take action to address them.
- b. Explain the importance (to self and others) of new understandings, skills, and strategies gained through the process.
- c. Evaluate own work with project criteria, set goals for improvement, and strive to meet project deadlines.

- d. Celebrate special accomplishments.

Assessment and Evaluation

A variety of “Assessment and Evaluation” strategies will be implemented. Once again, accommodating student needs and learning styles while assessing their knowledge, skills, abilities, and attitudes are of prime concern.

Assessment and Evaluation strategies chosen reflect the needs of the individual whenever possible. Anecdotal records and observation checklists are recorded on an ongoing basis throughout the course.

Assessment and evaluation require thoughtful planning and implementation to support the learning process and to inform teaching. All assessment and evaluation of student achievement is based on the outcomes in the 21st Century Learning curriculum. Assessment involves the systematic collection of information about student learning with respect to:

- achievement of provincial curriculum outcomes
- effectiveness of teaching strategies employed
- student self-reflection on learning.

Evaluation compares assessment information against criteria based on curriculum outcomes for the purpose of communicating to students, teachers, parents/caregivers, and others about student progress and to make informed decisions about the teaching and learning process.

Reporting of student achievement must be in relation to curriculum outcomes. Assessment information unrelated to outcomes (e.g., attendance, behaviour, general attitude, completion of homework, effort) can be gathered and reported to complement the reported achievement related to the outcomes of 21st Century Learning 20L.

We assess students for three interrelated purposes of assessment. Each type of assessment, systematically implemented, contributes to an overall picture of an individual student’s achievement.

Assessment for learning involves the use of information about student progress to support and improve student learning and inform instructional practices, and:

- is teacher-driven for student, teacher, and parent use
- occurs throughout the teaching and learning process, using a variety of tools
- engages teachers in providing differentiated instruction, feedback to students to enhance learning, and information to parents in support of learning.

Assessment as learning involves student reflection on and monitoring of her/his own progress related to curricular outcomes and:

- is student-driven with teacher guidance for personal use

- occurs throughout the learning process
- engages students in reflecting on learning, future learning, and thought processes (metacognition).

Assessment of learning involves teachers' use of evidence of student learning to make judgements about student achievement and:

- provides the opportunity to report evidence of achievement related to curricular outcomes
- occurs at the end of a learning cycle using a variety of tools
- provides the foundation for discussion on placement or promotion.

In 21st Century Learning 20L, students need to be engaged regularly in assessment as learning. The various types of assessments should flow from the learning tasks and provide direct feedback to the students regarding their progress in attaining the desired learnings as well as opportunities to set and assess personal learning goals related to the content of 21st Century Learning 20L.

From http://p21.org/storage/documents/ss_map_11_12_08.pdf

Adapted from http://p21.org/storage/documents/aacte_p21_whitepaper20L10.pdf

Appendix A: Successful Learners

Alberta Assessment Consortium Successful Learners Diagram.



Successful learners take ownership for and are engaged in their learning. They are on their way to becoming self-reliant and personally responsible. This graphic reflects and supports the principles and strategies represented in the AAC key visual, *Assessing Student Learning in the Classroom*.

Appendix B: Developing Literacies

Developing Literacies (Related to CELs of Communication, Numeracy, Technological Literacy, and Independent Learning)

Literacies provide many ways to interpret the world and express understanding of it. Being literate involves applying interrelated knowledge, skills, and strategies to learn and communicate with others. Communication in a globalized world is increasingly multimodal. Communication and meaning making, therefore, require the use and understanding of multiple modes of representation. Each area of study develops disciplinary literacies (e.g., scientific, economic, physical, health, linguistic, numeric, aesthetic, technological, cultural) and requires the understanding and application of multiple literacies (i.e., the ability to understand, critically evaluate, and communicate in multiple meaning making systems) in order for students to participate fully in a constantly changing world.

K-12 Goal: Construct knowledge related to various literacies
<ul style="list-style-type: none">● Acknowledge the importance of multiple literacies in everyday life● Understand that literacies can involve words, images, numbers, sounds, movements, and other representations and that these can have different interpretations and meanings● Examine the interrelationships between literacies and knowledge, culture, and values● Evaluate the ideas and information found in a variety of sources (e.g., people, databases, natural and constructed environments)● Access and use appropriate technologies to investigate ideas and deepen understanding in all areas of study.
K-12 Goal: Explore and interpret the world using various literacies
<ul style="list-style-type: none">● Inquire and make sense of ideas and experiences using a variety of strategies, perspectives, resources, and technologies● Select and critically evaluate information sources and tools (including digital) based on the appropriateness to specific tasks● Use various literacies to challenge and question understandings and interpretations● Interpret qualitative and quantitative data (including personally collected data) found in textual, aural, and visual information gathered from various media sources● Use ideas and technologies in ways that contribute to creating new insight.
K-12 Goal: Express understanding and communicate meaning using various literacies

- Create, compute, and communicate using a variety of materials, strategies, and technologies to express understanding of ideas and experiences
- Respond responsibly and ethically to others using various literacies
- Determine and use the languages, concepts, and processes that are particular to a discipline when developing ideas and presentations
- Communicate ideas, experiences, and information in ways that are inclusive, understandable, and useful to others
- Select and use appropriate technologies in order to communicate effectively and ethically.

Saskatchewan Ministry of Education. (2010). Cross-curricular Competencies. Regina SK: Saskatchewan Ministry of Education.

Appendix C: Sample Literacy Challenges

Sample mini challenges can also be found in the Instant Challenge publications from:

Destination Imagination

http://www.shopdi.org/index.php?main_page=index&cPath=7

Destination Imagination British Columbia

http://www.bcdi.org/index.php?option=com_rokquickcart&view=rokquickcart&Itemid=100

Pearson Destination Imagination: Classroom Edition

(please see school division consultant for a subscription to this resource)

<http://www.pearsoncanadaschool.com/?locator=PS259g>

SER2.2 Financial literacy

Mini Challenge

Your challenge is to identify a need you have and reduce what you spend on it by 30%.

Step One: Take a minute to think about the needs you have for food, clothing, transportation and social/entertainment. (1 min)

Step Two: Choose a need and create a personal plan for reducing the amount of money you spend on that need by 30%. (5-10 min)

Step Three: Share your plan with the class. (2 min)

Group Challenge

Outcome: LIT2.2 Develop and demonstrate 21st century skills necessary to enhance and promote financial literacy.

Link to 21st Century Skills:

- critical thinking
- communication
- collaboration
- creativity and innovation skills

We all need to eat. The cost of food is rising, with the cost of healthy and fresh foods rising exponentially faster than less healthy options. Individuals and families in Canada often sacrifice healthy food options because of financial limitations. This challenge is designed to put your budgeting, planning, creativity, and collaboration skills to a very practical test.

You are a young person who has just moved in with a roommate. The two of you will need to work together to plan and budget your food/money to keep you fed for one week (7 days). Your budget will be based on an individual working a 36.5 hour week at a rate of \$11.50/hr. After taxes, income deductions, rent (1/2 of a two bedroom apartment), utilities, internet, insurance, fuel, phone, entertainment, clothing, and savings your weekly food budget is \$55.

Although you will not be required to adhere to the Canada Food Guide you will need to plan your daily food intake and compare it to recommended food intake for someone of your age and gender as stated in the Canada Food Guide.

For each day, you need to record how much money you are spending on each food item. Reflect on the food selections you made and the money you spent. Provide specific examples of where your budget restricted your food choices. Create a multimedia presentation to share your learning experience.

Standards and Criteria for Success - As part of your project, you will:

- collect information from various sources
- determine the goals of your project and all the steps and activities you will use to reach those goals
- decide who will do what and when, and carry out the tasks
- find and work with community partners
- keep track of all your activities and the results of your project

SER2.3 Civic literacy

Mini Challenge

You and your teammates will work together to create a 'Pay it Forward' idea.

Step One: As a team, brainstorm a list of ways that you could pay it forward to an organization or group of people in your community. (5 min)

Step Two: Using a decision making method (voting, consensus...) choose the idea that your team would most like to initiate. (1 min)

Step Three: If you were to follow through with the idea, how much time, money, and effort would it take to actualize the idea? What benefits would your community see as a result of your idea? (5 min)

Group Challenge

Outcome: LIT2.3 Develop and demonstrate 21st century skills necessary to enhance and promote civic literacy.

Link to 21st Century Skills:

- X critical thinking
- X communication
- X collaboration
- o creativity and innovation skills

City Councils are made up of the city's Mayor and elected city councillors who represent the interests of each ward of the city. First Nation band councils are made up of the chief and councillors who represent all band members. There are many issues that these elected officials make decisions on such as public facilities, infrastructure, waste disposal, and economic development to name a few. Councils often rely on city departments/committees, community agencies, and consulting firms to provide background knowledge and research the issue before taking action.

You are a consulting firm who has been contracted to research and analyze a civic issue for a specific community (city, municipality, reserve). You have been asked to present your analysis to the local council (e.g., Mayor and Council, Chief and Council). You will create a media presentation that clearly describes the causes, consequences, and possible solutions to the issue.

As part of your project, you will:

- collect information about the community and the issue
- determine the goals of your project and all the steps and activities you will use to reach those goals
- decide who will do what and when, and carry out the tasks
- keep track of all your activities and the results of your project

SER2.4 Health literacy

Mini Challenge

As a team, you will evaluate the risky behaviours teens may participate in and how the risks could be reduced.

Step One: As a team, list the habits or practices teens engage in that carry risks to their and/or others health and safety. E.g., eating unhealthy food; exercising too much or too little; too much time on your cell phone. (3 min)

Step Two: List the habits or practices that teens engage in that promote health and safety. (2 min)

Step Three: Decide which habits or practices cause the greatest risk and brainstorm ways that teens could reduce these risks. (3 min)

Step Four: Share your findings with your class. (3 min)

Group Challenge

Outcome: LIT2.4 Develop and demonstrate 21st century skills necessary to enhance and promote health literacy.

Link to 21st Century Skills:

- critical thinking
- communication
- collaboration
- creativity and innovation skills

Maintaining or improving one's health requires continuous balancing of the dimensions of wellness. This holistic approach to living addresses our physical, psychological, social and spiritual well-being. Why are some communities healthier than others? What can we do to support a healthy community?

You have been asked to create a proposal for a multi-purpose recreation facility that promotes and encourages community wellness. The facility may target youth, families, seniors or the community as a whole. You need to convince the community planning board that a healthy lifestyle includes more than access to physical activities and there is a need for this multi-purpose public facility. Your proposed facility must address the physical, psychological, social and spiritual well-being of members of the community.

*(*Wellness 10 curricula defines the dimensions of wellness and requires students to evaluate one's understanding of wellness)*

Standards and Criteria for Success - As part of your project, you will:

- collect information about the community and the need
- determine the goals of your project and all the steps and activities you will use to reach those goals
- decide who will do what and when, and carry out the tasks
- find and work with community partners
- keep track of all your activities and the results of your project

SER2.5 Environmental literacy

Mini Challenge

With a partner, you will evaluate the waste you contribute to the environment and how you could reduce this waste.

Step One: On your own, list the items that you throw away the most (ex. Ziploc bags, hairspray bottles, paper). (1 min)

Step Two: With your partner, chose an item from each list that you could either recycle, reduce, or reuse (ex. Recycle paper, use refillable hair spray bottles, create a new product instead of using Ziploc bags) (1 min)

Step Three: Use your creativity to redesign the packaging for these items, plan for a way to reuse the materials, or develop a new way to recycle the items. (4 min)

Step Four: Share your findings with your class. (1 min)

Group Challenge A

Outcome: LIT2.5 Develop and demonstrate 21st century skills necessary to enhance and promote environmental literacy.

Link to 21st Century Skills:

- critical thinking
- communication
- collaboration
- creativity and innovation skills

Saskatchewan has an abundance of natural resources. With unknown mineral potential, mining is a viable economic strategy for our province. What happens once the mineral is depleted and a mine closes? Many companies throughout the world have undergone the process of converting a former mine into useful, productive land. Reclaimed land is not the same as the original ecosystem. Your challenge is to describe the environmental impacts, both pro and con, of using Saskatchewan land for mining and then reclaiming it.

Group Challenge B

Link to 21st Century Skills:

- critical thinking
- communication
- collaboration
- creativity and innovation skills

Life is full of trade-offs. For example, driving faster will get you to your destination quicker, but it will burn more fuel thus costing more money and having a greater environmental impact. To take this example further, slowing down even more (riding a bike for example) will require no fossil fuel but will take more time, personal exertion, and effort.

Your challenge is to create an easy to use chart recommending modes of transportation, taking into account distance, cargo, safety concerns, best environmental practices and any other factors you feel need to be included. Basic table example:

Distance	Road/Path Conditions	Cargo	Recommended Transportation
>2Km	Good, City Street	> 20 lbs.	Walking **** Bike **** Car *
>2Km	Good,	<20 lbs.	Walking ** Bike *** Car **
2-10 Km	Country Grid Road In daylight	>20 lbs.	Walk ** Bike **** Car *

Once your chart has been created by your group, you will need to test your recommended transportation mode. To do this you will abide by your chart for one week only using the highest recommended mode of transportation. At the end of the one week test you will make any necessary adjustments to your chart. The final piece to your challenge will be to present your recommended mode of transportation chart at a school staff meeting. Your presentation will make the case for environmentally friendly transportation and will challenge the school staff to take the one week transportation challenge for themselves.

Standards and Criteria for Success - As part of your project, you will:

- collect information about the community and the need
- determine the goals of your project and all the steps and activities you will use to reach those goals
- decide who will do what and when, and carry out the tasks
- find and work with community partners
- keep track of all your activities and the results of your project

SER2.6 Media literacy

Mini Challenge

In this mini challenge you will either teach or learn a cell phone skill.

Step one: Partner up with a classmate. At least one member of the pair requires a cell phone. Decide who will be the teacher and who will be the learner. (1 min)

Step Two: Brainstorm a list of cell phone skills that you would either like to learn, or would be able to teach someone else. (E.g., How to link email to your phone, set up a calendar, change privacy settings.) (2 min)

Step Three: Choose the skill that you will focus on. (1 min)

Step Four: Teach the skill to the partner. (4 min)

Step Five: The learner will explain the skill they learnt to the larger group/class. (1 min)

Group Challenge

Outcome: LIT2.6 Develop and demonstrate 21st century skills necessary to enhance and promote media literacy.

Link to 21st Century Skills:

- critical thinking
- communication
- collaboration
- creativity and innovation skills

With the recent explosion of internet based media and social media it is not your grandparents or even your parents media world anymore. This is your chance to prove your internet and social media prowess by teaching others a thing or two.

Your challenge is twofold; first, you will need to select a general form of internet media (written/video blogs, file sharing etc.) or a specific form of social media (Facebook, Instagram, Twitter etc.) that will be a subject of a one hour professional development workshop you will facilitate. Second, you will need to find an audience for your workshop. There is no shortage of people young and old who do not feel comfortable using modern media. These groups could include young children, adults (teachers, parents), the elderly, and/or communities new to reliable internet access. You must ensure that you use your expertise in this area to deliver a workshop that is tailored to the needs of your audience.

Things to consider:

- What makes a good workshop?

- How best does my audience learn?
- How much do I know about the media I have chosen and what more do I need to learn to give the best workshop possible?

Standards and Criteria for Success - As part of your project, you will:

- collect information about the community and the need
- determine the goals of your project and all the steps and activities you will use to reach those goals
- decide who will do what and when, and carry out the tasks
- find and work with community partners (learners)
- assess your success by providing participants a workshop evaluation at the conclusion of the workshop

SER2.7 Entrepreneurial literacy

Mini Challenge

Cell phones are an important part of many peoples' lives. However, you may feel that they are lacking in one important feature. What is one thing that you would like to see improved on a cell phone?

Step One: Create teams of 2-3 students. (30 sec)

Step Two: Choose one brand of cell phone (iPhone, Samsung, etc.). Brainstorm a list of items you would like to change or add to the cell phone to make it better. The change or addition could be cosmetic or a change/addition of hardware or software. (3 min)

Step Three: As a group, decide on the one item that you would like to improve. (1 min)

Step Four: Focus on the particulars of the improvement and create a brief presentation to share with your classmates. You do not need to know how to implement the idea. (5 min)

Step Three: Share your idea with your class.

Group Challenge

Outcome: LIT2.7 Develop and demonstrate 21st century skills necessary to enhance and promote entrepreneurial literacy.

Link to 21st Century Skills:

- critical thinking
- communication
- collaboration
- creativity and innovation skills

The first step to creating a small business is a feasible idea. Your challenge is to do what many successful entrepreneurs have done - take an already existing product or service and tailor it for a specific community. To secure funding through a bank, credit union, or private investor (think Dragon's Den), entrepreneurs must keep these questions in mind:

1. Is there a market for it?
2. Does it make life easier or solve a problem?
3. Is it viable?
4. Can it generate profit?
5. Is there room for growth?

You will need to develop a presentation, either written or oral, where you pitch a small business idea for an improved product or service. The future success of your business hangs in the balance of

your presentation to potential investors.

Standards and Criteria for Success - As part of your project, you will:

- research your market
- analyze the profitability of adapting a product or service to better suit the needs of your community
- decide who will do what and when, and carry out the tasks.
- find and work with community partners

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