21st Century Competencies
Professional Development Focus for 2013-2014

- Develop Critical Thinking
- Develop Collaboration
- Develop Computer and Digital Technologies

LEARNING GUIDE

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Fall 2013
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Technology Tools and Facilitation Strategies available on the 21\textsuperscript{st} Century Competencies Wikispace at


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Sun West School Division
Goals of the 21st Century Competency Focus

“We are living in the knowledge and digital age. We are already over a decade into the 21st Century and although we are witnessing pockets of innovation in Canada’s education systems, we are not adapting to the new reality fast enough. We need to accelerate the pace of change and ensure the shift toward 21st Century models of learning is systemic across all of Canada and for all learners. Adopting 21st Century models of learning in Canada’s education systems is imperative to positioning all students and the nation as a whole for success. C21 Canada is advocating for the adoption of 21st Century models of learning for all education systems across all of Canada. ....”

- C21 Shifting Minds

During the 2013-2014 school year, teachers in the Sun West School Division will access four half days of professional development in their own schools to create awareness of the 21st century competencies in order to prepare our learners for an ever-changing future.

In each school, Learning Coaches will facilitate the days, working with teachers to explore the seven competencies and to assist educators in implementing critical thinking and collaboration strategies into classrooms.

The days are intended to provide engaging, hands-on, authentic learning experiences that allow each teacher to “start where they are”. The half day workshops have been designed to bring teachers together, both face-to-face and virtually, to learn with and from each other. As a community of educators, we will work collectively to shift teaching practices to reflect 21st century models of education.

This is not “one-size fits all” professional development. Instead, these days will provide a flexible learning environment where teachers will be able to explore aspects of critical thinking and collaboration that has meaning for them and their classrooms.

SMART Goal: By June 2014, Sun West School Division teaching staff will:

1. Demonstrate personal growth in the understanding of critical thinking and collaboration.
2. Apply understandings of the competencies (critical thinking and collaboration) to reflect 21st century models of learning.
3. Use technology tools purposefully for teaching and learning.
4. Demonstrate a positive impact on student learning in the classroom.
5. Share publishable artifact(s).
C21 is an organization of Canadians for 21st Century Learning and Innovation. C21 Canada has conducted research and developed “Shifting Minds – A 21st Century Vision of Public Education for Canada”. Incorporating this research, the Board of Education believes that Sun West students need to be competent in literacy, numeracy and science. Today’s knowledge and digital reality means that changes occur at an astronomical rate. This reality requires our students and staff to have additional competencies and skills. The Sun West School Division will therefore endeavor to infuse 21st Century learning skills into all curricula and into the development of any and all educational programming. Staff will be supported and expected to continually develop their 21st Century Competencies.

Specifically

1. Develop Creativity, Innovation and Entrepreneurship
   1.1 Creativity is the ability to apply creative thought processes to create something of value.
   1.2 Innovation and entrepreneurship is the capacity to create and apply new knowledge in innovative and entrepreneurial ways to create new products or solve complex problems.

2. Develop Critical Thinking
   2.1 A deep understanding of and capacity to apply the elements and processes associated with critical thinking and problem solving.
   2.2 The ability to acquire, process, interpret, rationalize and critically analyze large volumes of often conflicting information to the point of making an informed decision and taking action in a timely fashion.

3. Develop Collaboration
   3.1 The ability to interact positively and respectfully with others in creating new ideas and developing products.
   3.2 The ability to lead or work in a team and to relate to other people in varying contexts, including capacity to resolve and manage conflict.
   3.3 The capacity for sensitivity to the issues and processes associated with collaborating across cultures.
   3.4 The ability to collaborate across networks, using various information and communication technologies.

4. Develop Communication
   4.1 High level literacy skills with multilingual capacity a definite asset.
4.2 The ability to use technology to develop 21st Century competencies in the context of core subjects.

4.3 The capacity to communicate using a variety of media and technologies.

4.4 The ability to access, analyze, integrate and manage large volumes of information.

4.5 The capacity to effectively use social media to communicate and resolve challenges.

4.6 The ability to critically interpret and evaluate ideas presented through a variety of media and technologies.

4.7 Highly developed cooperative interpersonal capabilities.

5. Develop Character

5.1 Learners will develop 21st Century Life Skills, such as:

- Life-long learner
- Leadership, responsibility and accountability
- Self-directed, adaptable and resilient
- Tolerant, ethical and fair
- Personal productivity
- Interpersonal (people) skills
- Mental and physical well being
- Proficiency in managing personal relationships.

6. Develop Cultural and Ethical Citizenship

6.1 The capacity to comprehend Canada’s political, social, economic and financial systems in a global context.

6.2 The ability to appreciate cultural and societal diversity at the local, national and global levels.

6.3 The ability to critically analyze the past and present and apply those understandings in planning for the future.

6.4 The capacity to understand key ideas and concepts related to democracy, social justice and human rights.

6.5 Disposition and skills necessary for effective civic engagement.

6.6 The ability to understand the dynamic interactions of Earth’s systems, the dependence of our social and economic systems on these natural systems, our fundamental connection to all living things, and the impact of humans upon the environment.

6.7 The capacity to consider the impact of societal and environmental trends and issues.

7. Develop Computer and Digital Technologies

7.1 The capacity to use computers and digital resources to access information and create knowledge, solutions, products and services.

7.2 The capacity to use social media for learning.

Note: While the capacity to effectively use computer and digital technologies is identified above as a 21st Century competency, Information Communications Technology (ICT) must also be seen as inherent in all other competencies. Specifically, this means that ICT is a key enabler in achieving all the other competencies.
Celebrating Our Journey

To celebrate our collective journey and to share our learning with others, the Learning Coaches will collect artifacts created by teachers during the 2013-2014 school year.

Artifacts will then be compiled and published as an e-book for online distribution.

What is an artifact?

An artifact can be anything that showcases how the competencies have been integrated into classrooms.

It could be a lesson plan, a summary, photos of students, a video, a link to a wiki or a blog, a digital scrapbook, … the sky is the limit!

All artifacts will include the following information:

- Teacher Name and School
- Grade, Subject, Outcome(s)
- Competency
- Evidence (lesson plan, summary, etc.)

For examples of artifacts, check out the 21st Century Competencies Wikispace.
New Model of Professional Learning

“In its broadest meaning, 'self-directed learning’ describes a process by which individuals take the initiative, with or without the assistance of others, in diagnosing their learning needs, formulating learning goals, identify human and material resources for learning, choosing and implement appropriate learning strategies, and evaluating learning outcomes.” (Knowles, 1975, p. 18)

Much time has been put into designing the four half days to meet individual needs by creating an opportunity for self-directed learning. Additionally, Sun West’s Teacher Professional Handbook, particularly Domain 4 – Professional Leadership and Responsibilities, forms a foundation on which these days have been built (see right).

The focus of these four days will be on learning about the 21st century competencies, particularly critical thinking and collaboration. But how teachers explore these skills and make plans for integrating the 21st century competencies into individual classrooms will be decided by each teacher with guidance and support from the Learning Coaches. This model of professional development will allow each teacher to explore big ideas that will best suit their classrooms and their learners.

The self-directed nature of these days encourages teachers to identify their individual needs and interests, develop personal learning goals, and to locate activities and resources that will assist in reaching those goals, and reflect throughout the process.

Domain 4: PROFESSIONAL & LEADERSHIP RESPONSIBILITIES

Reflecting on Teaching:
- Reflects on lessons, analyzes successes and provides suggestions for improvement.
- Participates in professional development opportunities.
- Seeks out or acts as a mentor/coach.

Contributing Leadership to the School and Division:
- Participates in professional relationships with colleagues (shares expectations, materials, insights).
- Demonstrates a mutual respect and cooperation with colleagues.

Growing and Developing Professionally:
- Demonstrates growth in content knowledge and pedagogy (attends workshops and conferences or becomes a member of professional organization).
- Participates in collaborative work groups (peer coaching, PLT, study groups, etc.)
- Works with interns/student teachers.
- Uses technology and seeks to improve expertise.
Making Connections

The seven competencies outlined in Sun West School Division’s Board Policy 18 are not stand-alone skills that are to be taught in addition to the outcomes and indicators present in all curriculum documents.

Instead, they are threaded through the **Broad Areas of Learning** (Self and Community, Identity and Interdependence, Lifelong Learning) and the **Cross Curricular Competencies**. Each renewed curriculum document provides a visual representation of these components, illustrating the connections between the subject content and the ways in which teachers help students construct meaning.

The 21st century competencies reflect the “how” and “why” of teaching, rather than the “what”.

“The competencies are addressed through all areas of study and through school and classroom routines, relationships, and environments. Such inclusive, culturally diverse, resource-rich environments include increasingly networked, technology-rich classrooms. Each cross-curricular competency has three K-12 goals.” – Saskatchewan Ministry of Learning

| Goals to develop | o Think and learn contextually  
o Think and learn creatively  
o Think and learn critically. |
<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>Thinking</strong> are:</td>
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</tbody>
</table>
| **Goals to develop** | o Understand, value, and care for oneself (intellectually, emotionally, physically, spiritually)  
o Understand, value, and care for others  
o Understand and value social, economic, and environmental interdependence and sustainability. |
| **Identity and Interdependence** are:|                                                                                   |
| **Goals to develop** | o Construct knowledge related to various literacies  
o Explore and interpret the world using various literacies  
o Express understanding and communicate meaning using various literacies. |
| **Literacies** are:|                                                                                   |
| **Goals to develop** | o Use moral reasoning processes  
o Engage in communitarian thinking  
o Take social action. |
| **Social Responsibility** are:|                                                                                   |

**Additional Resource Links:**

- [Broad Areas of Learning – Ministry of Learning Document (PDF)](#)
- [Cross Curricular Competencies (PDF)](#)
What is Critical Thinking?

- Critical thinking is a higher order of thinking: it is the practice of using a number of different advanced thinking skills in a variety of complex ways.
- Critical thinking focuses on the thought: it looks at how facts are proven, arguments are formed, conclusions are reached, not just what the facts, argument or conclusions may be.
- Critical thinking is self-reflective: it involves reflecting on, questioning and testing your own thinking processes.
- Critical thinking is discipline-specific: it engages in particular forms of reasoning, such as mathematical reasoning, historical analysis or literary interpretation, which are specific to a particular discipline.

How is Critical Thinking Different from Thinking?

<table>
<thead>
<tr>
<th>Thinking</th>
<th>Critical Thinking</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Focus</strong></td>
<td>On information: data, facts, examples</td>
</tr>
<tr>
<td></td>
<td>On ideas: opinions, positions</td>
</tr>
<tr>
<td></td>
<td>On ideas: assumptions, biases, flaws in reasoning, point of view, context, implications</td>
</tr>
<tr>
<td><strong>Activity</strong></td>
<td>Organizing and making connections between pieces of information or ideas, sometimes making basic inferences</td>
</tr>
<tr>
<td></td>
<td>Deeply and broadly questioning and testing the ways in which an idea is formed as well as how you have been interpreting and examining the idea, Thinking about your own thinking while you are thinking about the thinking of others.</td>
</tr>
<tr>
<td><strong>Goal</strong></td>
<td>To form an opinion about what you are thinking about</td>
</tr>
<tr>
<td></td>
<td>To apply criteria in forming a conclusion or evaluation about what you have been thinking about and how you have been thinking about it.</td>
</tr>
</tbody>
</table>

Criteria for Good Critical Thinking

Good critical thinking meets the criteria of these intellectual values:

- Clarity
- Accuracy
- Precision
- Relevance
- Depth
- Breadth
- Logic

(adapted from [http://ctl.utsc.utoronto.ca/twc/sites/default/files/CriticalThinking.pdf](http://ctl.utsc.utoronto.ca/twc/sites/default/files/CriticalThinking.pdf))
How Do We Think Critically?

1. We Begin With the Right Approach
   - **Reason**: We base our thinking in logic, not feelings.
   - **Self-Awareness**: We pay attention to our own and others’ assumptions, biases and perspectives.
   - **Integrity**: We care about doing our intellectual work honestly and accurately rather than about being right.
   - **Discipline**: We put effort into doing our work comprehensively and precisely.
   - **Open-mindedness**: We consider alternatives and other points of view.

2. We Look Deeper and Farther
   There are countless ways in which we look deeper and farther when thinking critically. For example, we look deeper when we make inferences about an argument’s hidden assumptions and values. We look farther when we connect a study to theory in our discipline. We always think about the implications and importance of what we find.

3. We Ask Complex Questions
   We develop and pose questions that help us look deeper and more broadly and that require a variety of thinking processes to answer. We generate specific, complex questions based on what exactly we are thinking about, starting with basic critical inquiry:
   - Who is the implied audience?
   - What are the strengths and weaknesses of this?
   - What are the different possible solutions to this problem and which seems most effective?
   - What is the nature of the relationship between this and that?
   - What exactly is the logical flaw in this reasoning?
   - Is this really relevant to that? If not, where does the connection break down?
   - What are the underlying assumptions and values?

4. We Answer Questions Using a Variety of Thinking Processes
   - **Analysis**: breaking something into parts to better understand the parts and the whole (identifying, classifying, categorizing, comparing)
   - **Synthesis**: making connections between the parts and the whole to see the pattern of relationships (organizing, connecting, designing, predicting)
   - **Application**: examining the connection (s) between the parts and the whole to make inferences about the implications and meanings of the pattern(s) (associating, inferring, decoding)
   - **Evaluation**: forming judgments about meanings, qualities and values (justifying, critiquing, verifying, deciding)

5. We Reflect on How We Are Answering the Questions
   Throughout the process, we ask ourselves questions such as:
   - Is that clear or is there still some confusion I need to clarify? Is that really true?
   - Do I need to be more specific or detailed? How is that connected to the central focus?
   - Am I thinking about this in a complex enough way or should I go deeper and further in my thinking?
   - Do I need to consider a bigger framework or a different point of view?

(adapted from [http://ctl.utsc.utoronto.ca/twc/sites/default/files/CriticalThinking.pdf](http://ctl.utsc.utoronto.ca/twc/sites/default/files/CriticalThinking.pdf))
<table>
<thead>
<tr>
<th>CRITICAL THINKING SKILLS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1 Knowledge</strong></td>
</tr>
<tr>
<td><strong>2 Comprehension</strong></td>
</tr>
<tr>
<td>RBell _____ in your own words.</td>
</tr>
<tr>
<td><strong>3 Application</strong></td>
</tr>
<tr>
<td>Use of facts, rules, and principles</td>
</tr>
<tr>
<td><strong>4 Analysis</strong></td>
</tr>
<tr>
<td>Separating a whole into component parts</td>
</tr>
<tr>
<td><strong>5 Synthesis</strong></td>
</tr>
<tr>
<td>Combining ideas to form a new whole</td>
</tr>
<tr>
<td><strong>6 Evaluation</strong></td>
</tr>
<tr>
<td>Developing opinions, judgments, or decisions</td>
</tr>
</tbody>
</table>

Adapted from Jennifer Duncan, The Writing Centre, University of Toronto at Scarborough
SEE ALSO: www.criticalthinking.org
### What Might Be an Example of Critical Thinking?

Critical thinking is a highly complex operation; the following examples are from our Saskatchewan curriculum documents:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Question</th>
<th>Activity</th>
<th>Reflection</th>
</tr>
</thead>
</table>
| Grade 1 Arts Ed CP1.7 (a-d)  | What patterns do we see in art and the environment? How do artists create patterns? What patterns can I use in my own artwork? | Application: Observe and describe patterns in natural and man-made environments, and in selected artworks. 
Synthesis: notice patterns in the environment and artwork created by color, line and shape. 
Evaluation: compare formal and informal patterns in the environment and artworks. | What patterns did I see and use? Were they formal or informal? Could my audience identify the patterns I used? |
| Grade 2 ELA CC2.1 (f)       | What do I need to know so that I can compose and create a representation that explores: identity/community/social responsibility? What do I want to find out? Where could I find the information? How do I decide what information is important? | Application: Choose important details or facts that pertain to their representation. | Have I included only relevant details? Was my final product interesting to my audience? What did I do that worked well? What might I do differently next time? |
| Grade 5 Social Studies IN5.2 | What is the evolution of multiculturalism in Canada?                     | Comprehension/Evaluation: Describe Canada’s historical and current demographics – population, age, location, trends and challenges 
Analysis: Compare immigration policies and practices of the 19th century to current practices. 
Evaluation: Examine Canadian government treatment of immigrants to Canada. | Can I share my knowledge of immigration as it pertains to multiculturalism in Canada? |
| Grade 7 Health USC7.5        | How do personal food choices impact my health and wellbeing? How is my knowledge of nutrition reflected in my food choices? | Knowledge/Evaluate: Track and evaluate personal food intake to Canada Food Guide. 
Evaluation: Create an action plan that reflects the learning about accurate and current nutrition knowledge. | Could I create and maintain my action plan? |
| Math 10 FP10.3 (m)          | What evidence can you find that the land allocation in Treaty 4 is accurate? How could you determine a precise land measurement for Treaty 4? | Analysis: Explore Treaty 4 taking note of boundaries and borders. Explore the details and decide on accuracy. 
Evaluation: Determine the precise land area for Treaty 4. | Am I able to accurately calculate a Treaty area? How did they do this in 1874? |
| History 10                  | Is it possible to make a fair and accurate comparison between the standard of living of the populace of different nations? | Application: Define fair and standard of living. 
Synthesis/Evaluation: Choose places to compare and contrast. Create evaluative/persuasive findings and make a judgment. | Was I able to compare populations’ standard of living to make a fair judgment? |
Ten Takeaway Tips for Teaching Critical Thinking

Ideally, teaching kids how to think critically becomes an integral part of your approach, no matter what subject you teach. But if you’re just getting started, here are some concrete ways you can begin leveraging your students’ critical-thinking skills in the classroom and beyond.

1. **Questions, questions, questions.**
   Questioning is at the heart of critical thinking, so you want to create an environment where intellectual curiosity is fostered and questions are encouraged.

2. **Start with a prompt and help them unpack it.**
   Pose a provocative question to build an argument around and help your students break it down. Identify any ambiguous or subjective terms and have students clarify and define them. Once the terms are clearly defined, students are better able to seek and find evidence that is relevant to their argument.

3. **Provide tools for entering the conversation.**
   At the beginning of the year, give students a list of sentence starters and connectors such as “I agree/disagree because,” “I can connect to your statement because,” and “Can you clarify what you mean by.” Providing them with these words gives them ways to enter the conversation and will guide their thought process in analyzing the argument.

4. **Model your expectations.**
   It all comes back to modeling. For example, if you have a behavioral expectation, the best way to teach that is to model. Demonstrate ways to enter a conversation, the difference between an analytical point and a summary, and appropriate ways to disagree with one another.

5. **Encourage constructive controversy.**
   Lively discussions usually involve some degree of differing perspectives. An effective strategy to assist students in this is deBono Thinking Hats (see wiki for more information on strategies). You can give students controversial topics and let them hash it out, but make sure to first demonstrate for them respectful ways of disagreeing and establish clear rules for voicing different perspectives. These rules include the language to use when disagreeing and that the disagreement must be objective, such as finding a flaw in the evidence or the reasoning, not a subjective disagreement based on personal opinions.

6. **Choose content students will invest in.**
   It’s important to choose topics that are relevant and significant to students to get them talking and engaged. Find rich sources (including texts, photos, art, even a single word) about pressing, relevant content to help fuel the discussions. Follow up with questions that range from factual to analytical to synthesis to evaluative.

7. **Set up critical thinking discussions.**
   Critical thinking discussions require students to ask questions to gain greater understanding or clarity. The teachers serve primarily as observers, offering prompts to keep the discussion moving.
They strive to engage students in critical thinking dialogue informally as well. It is the hope that one question leads to further questions and discussion.

8. Assess their reasoning through different methods.
How will we know if students are thinking critically? Challenge them to communicate back to you. Examples would be essays, critical thinking discussions, debates, research projects and speeches that give students the chance to demonstrate their skill and allow you to evaluate their reasoning in a variety of situations. Even written tests can foster critical thinking if they require the student to provide counterarguments to a series of statements using details and evidence from the unit of study.

9. Let students evaluate each other.
One way teachers can give some of the responsibility to the students is by setting up the room in a “fishbowl” configuration, with an inner circle and an outer circle. Students in the inner circle are the active participants while those in the outer are their peer evaluators. Included in the workbook is a critical thinking rubric that could be used by both students and teachers. It clearly lays out the criteria they are looking for.

10. Step back.
Give students the responsibility to be the thinkers in the class and drive the content. As a result they may take it in unexpected directions that are more relevant to them and are thus more likely to stick. Be prepared to step back a bit 😊

(adapted from http://www.edutopia.org/stw-kipp-critical-thinking-10-tips-for-teaching)

“Children must be taught HOW TO THINK, not what to think.”
Margaret Mead
What is Collaboration?

“Information age, rest in pieces. This is the Collaboration Age. We can all connect instantly across time zones and oceans. Previously impossible partnerships now produce startling innovations. And the four walls of your classroom no longer limit your students’ reach.” - Grace Rubenstein

- The ability to interact positively and respectfully with others in creating new ideas and developing products.

- The ability to lead or work in a team and to relate to other people in varying contexts, including capacity to resolve and manage conflict.

- The capacity for sensitivity to the issues and processes associated with collaborating across cultures.

- The ability to collaborate across networks, using various information and communication technologies.

(from Shifting Minds)

Collaborative versus Traditional Approaches

( adapted from “Getting Started: a Guide to Collaboration in the Classroom" by Kathleen Kane and Joan Harms)

<table>
<thead>
<tr>
<th></th>
<th>Traditional Approach</th>
<th>Collaborative Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control over learning</td>
<td>Teacher decides what learning will take place</td>
<td>Students have increased control over what they will learn</td>
</tr>
<tr>
<td>Responsibility for learning</td>
<td>Teacher-centered</td>
<td>Student-centered</td>
</tr>
<tr>
<td>Role of the teacher and students</td>
<td>Teachers are the decision-makers; students are passive recipients of information</td>
<td>Teachers are facilitators; students are active decision-makers</td>
</tr>
<tr>
<td>Classroom learning environment</td>
<td>Students work competitively</td>
<td>Students work cooperatively</td>
</tr>
<tr>
<td>Mastery of knowledge</td>
<td>Students master knowledge through memorizing content</td>
<td>Students master knowledge through constructing content such as PBL</td>
</tr>
<tr>
<td>Assessment</td>
<td>Teacher makes “tests” or other standardized assessment tools</td>
<td>Students help set their own goals and means of assessment (based on curricular outcomes)</td>
</tr>
</tbody>
</table>
The Benefits of Collaboration

1. **Small Groups Are Lifelike**: Almost everyone in the non-school world works in some kind of group, crew, office, team, line, shift or staff.

2. **Small Groups Generate Energy for Challenging Work**: Humans are social animals. We like to work together. As we build personal relationships within a group, we work harder because there is a sense of “we are in this together”.

3. **In Small Groups, We Are Smarter**: Through talking and communicating we can make new and better meanings together. When small groups of students think together, they create a deeper understanding.

4. **In Small Groups, Diversity is an Asset**: In small groups we can mesh and jigsaw different talents as we divide up the tasks and set to work.

5. **Small Groups Make Engaged, Interactive Learning Possible**: In small groups, a classroom experience can be more active, authentic, reflective, democratic, expressive, challenging, etc.

6. **Small Groups Allow Us to Differentiate Instruction**: When we teach in “whole-class mode”, it’s impossible to reach every student. Small groups allow us to meet the individual needs of all of our students.

7. **Employers Increasingly require Small-Group Skills**: Job advertisements are looking for the ability to work collaboratively with others, fit into our team approach, be team-oriented and hands-on.

8. **Well-structured Small-Group Work Enhances Student Achievement**: If we teach our students collaboration skills like social problem solving at a young age, not only will our students be more cooperative, they will show improvement in their academics as well as effective work habits, attitudes, and skills.

Adapted from *Inquiry Circles in Action*, Stephanie Harvey & Harvey Daniels (2009)
# Strategies for Collaboration

<table>
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<tr>
<th>Face to Face Strategies</th>
<th>Virtual Strategies</th>
</tr>
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<tbody>
<tr>
<td>• Jigsaws</td>
<td>• Skype</td>
</tr>
<tr>
<td>• Literature Circles</td>
<td>• Google Drive</td>
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<tr>
<td>• Stop, Think, React</td>
<td>• Bridgit</td>
</tr>
<tr>
<td>• Tracks of Thinking</td>
<td>• Facetime</td>
</tr>
<tr>
<td>• Creating Group Ground Rules</td>
<td>• Moodle</td>
</tr>
<tr>
<td>• Making and Using a Plan</td>
<td>• Wikis</td>
</tr>
<tr>
<td>• Think, Pair, Share</td>
<td>• Epals</td>
</tr>
<tr>
<td>• Three-Step Interview</td>
<td>• Blogging</td>
</tr>
<tr>
<td>• Numbered Heads Together</td>
<td>• Blackboard</td>
</tr>
<tr>
<td>• Six Thinking Hats</td>
<td><strong>NOTE:</strong> All Face to Face strategies can be applied to these virtual options</td>
</tr>
<tr>
<td>• Debates</td>
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<tr>
<td>• Collaborative Writing</td>
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<tr>
<td>• Symposium</td>
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<td>• Panel Discussion</td>
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<tr>
<td>• Mock role play of a meeting</td>
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<tr>
<td>• Paper Twist</td>
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</tbody>
</table>

“**What children can do together today, they can do alone tomorrow**”

~ Lev Vygotsky, 1962
# Criteria for Effective Collaborators

Adapted from *Inquiry Circles in Action*, Stephanie Harvey & Harvey Daniels (2009)

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Example/ Action</th>
</tr>
</thead>
</table>
| 1. Be responsible to the group | • Come prepared  
• Bring along interesting ideas/questions/artifacts  
• Take initiative, help people get organized  
• Live by the group’s calendar, group rules  
• Settle problems within the group  
• Fess up if unprepared |
| 2. Listen Actively | • Make eye contact  
• Nod, confirm, look interested  
• Lean in, sit close together  
• Summarize or paraphrase  
• Use names  
• Take notes when helpful |
| 3. Speak Up | • Join in, speak often, be active  
• Connect your ideas with what others have said  
• Ask lead and follow-up questions  
• Use appropriate tone and voice levels  
• Draw upon notes, materials, etc  
• Overcome your shyness |
| 4. Share the air and encourage others | • Show friendliness and support  
• Take turns  
• Be aware of who’s contributing; work to balance the airtime  
• Invite others to participate  
• Build upon and learn from others’ ideas |
| 5. Support your views and findings | • Explain and give examples  
• Refer to specific evidence  
• Connect or contrast your ideas  
• Dig deeper into the text or topic |
| 6. Show tolerance and respect | • Try to restate opposing views  
• Use neutral language in disagreeing  
• Offer your viewpoint  
• Welcome and seek insight |
| 7. Reflect and correct | • Do frequent reflections  
• Identify specific behaviours that helped or hurt the discussion  
• Talk openly about problems  
• Keep written record of group processing |
What Might Be an Example of Collaboration?

With every curriculum, there are outcomes that are best suited to be taught in a collaborative format. Here is a small sample of connections that might be made.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Outcome/indicators</th>
<th>Learning Activity</th>
<th>Self-Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Grade 3 Social Studies IN 3.1 (a, b, c)</strong></td>
<td>Analyze the daily life in a diversity of communities. How are needs met? What are some examples of cultural differences? How is my life the same as / different than the life of a child in the diverse community?</td>
<td><strong>Activity:</strong> Make arrangements to communicate with a diverse community in our province, country, or world. <strong>Collaboration strategies:</strong> Skype, email, Face Time, telephone or other online communication channel.</td>
<td>How well did I work with others to learn about diverse communities?</td>
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<tr>
<td><strong>Grade 3 Social Studies IN3.3</strong></td>
<td>Problem-based learning questions: Where do the clothes I wear or food I eat come from? How do my choices and actions affect people elsewhere in the world? What products are produced locally and sold elsewhere?</td>
<td><strong>Activity:</strong> Have students bring various pieces of clothing to school. Working in groups of 3 or 4, examine labels and identify the country of origin. Use Google Earth to find out more about the country of origin. Is child labour an issue? Connect with Plan Canada or other organizations that help children around the world. <strong>Collaboration strategies:</strong> problem-based learning; group work; email</td>
<td>Am I able to make good choices about the clothes and foods I buy based on what I have learned about their origins? Where did I improve on my collaboration skills within my working group?</td>
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<tr>
<td><strong>Grade 5 Arts Ed CP5.1 (c, d, h)</strong></td>
<td>Inquiry and the dance-making process: What are some sources of ideas for dance compositions? How is pop culture reflected in dance?</td>
<td><strong>Activity:</strong> Divide students into groups of 3 or 4. Groups will investigate street dances, current dance trends. Based on investigations, groups will create and perform their own dance compositions. <strong>Collaboration strategy:</strong> peer group inquiry; guest dancers peer group inquiry; guest dancers</td>
<td>How effectively did we use pop culture in our own dance compositions? Was I an effective contributor to the dance composition?</td>
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<td>Subject</td>
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<td>Grade 7</td>
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<td><strong>Activity:</strong> Start by showing students an example of a comparison poem and have them brainstorm some other topic ideas. Next vote on a topic and create a list of metaphors for the topic. From here choose 4 of the best metaphors by voting. As a class, edit and revise poem by organization, word choice, etc. Ask students to record final poem in their journals. <a href="http://www.lauracandler.com">www.lauracandler.com</a> <strong>Collaboration Strategy:</strong> Entire class, groups, pairs, online chat, Skype</td>
<td>Did I effectively participate and share my ideas with the class or my group? Was I able to support my opinion? If there was conflict was I able to help create a more positive atmosphere? As a class/group were we able to work together to create a collaborative poem?</td>
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<td>ELA</td>
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<tr>
<td>CC7.7</td>
<td>Am I able to use oral language to express clearly and collaboratively with others by sharing ideas, repeating for clarification, respond to questions and suggestions concisely, support opinions with evidence, recognize conflicts and negotiate a respectful atmosphere? Can I experiment with a variety of text forms by creating a collaborative poem?</td>
<td><strong>Activity:</strong> Students are divided into small groups where they must create a proposal about how to increase the amount of tourism in small town Saskatchewan. They must prepare and present their proposal to the local town council for feedback as well as hopeful support. <strong>Collaboration Strategy:</strong> Collaborate with local town council/ or guest such as major, Skype other small towns to gather ideas from them</td>
<td>Were we able to effectively work together by being flexible, using each other’s strengths, respecting opinions to create a realistic plan to increase tourism? Were we able to present/expess our ideas clearly and effectively in a formal meeting situation?</td>
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<td>CC7.9</td>
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<td>Grade 12</td>
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<td><strong>Activity:</strong> Students must work together to interview community members on a particular safety concern, such as Emergency Home Stay for Travels due to road conditions, the speed limits and stop signs in town, etc. They must work together to create a proposal that would benefit the safety of all and present it to the council, SCC, etc. <strong>Collaboration Strategy:</strong> Interview community members face to face, facetime, email, phone call Present via Skype or face to face at meeting.</td>
<td>Was I able to communicate clearly, work collaboratively to create a safety proposal for our town?</td>
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<td>ELA 30</td>
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<tr>
<td>CCA30.3 (a)</td>
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<td>Grade 9</td>
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<td>Health</td>
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<tr>
<td>USC9.2</td>
<td>Can I work with community members to analyze the safety in our town? Can I use appropriate language to talk about health issues such as safety? Can we propose how existing community safety promotions/strategies could be more comprehensive?</td>
<td><strong>Activity:</strong> Students must work together to interview community members on a particular safety concern, such as Emergency Home Stay for Travels due to road conditions, the speed limits and stop signs in town, etc. They must work together to create a proposal that would benefit the safety of all and present it to the council, SCC, etc. <strong>Collaboration Strategy:</strong> Interview community members face to face, facetime, email, phone call Present via Skype or face to face at meeting.</td>
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