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The ABC's of Digital Education 8

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TEACH
M A G A Z I N E

Spring is finally upon us!

It is a season of growth and renewal both outside and inside the classroom. So what's new in education? Coding is and kids can do it too. There's now a greater push to teach kids computer coding at school. It applies to virtually any subject and involves making plans to solve problems, breaking something complex into simple steps. This is useful in math and science, as well as literature and social studies. Coding gives students another communications tool. But you don't need to be a technology whiz to introduce it to your students. Our **Feature** story explains how teachers are bringing coding to their classes—and how you can do the same.

Also happening this spring is the anniversary of the Rwandan Genocide. Educator Bill Gowsell was a teenager in 1994 when the atrocity began. He watched the nightly news covering the massacre, yet the world had turned a blind eye. Still, there were those who sought to bring hope. In **Classroom Perspectives**, Gowsell discusses how he taught the unit to his grade 5-6 students, conveying a message of hope. On what resources did he rely? What impact did the topic have on his young and impressionable students?

Gone are the days of referencing a dusty set of atlases or hovering over a class globe. In our regular **Webstuff** column, we cover geography websites and apps that put the world at our fingertips. And in **Field Trips**, we feature farms that follow organic practices and teach students about sustainability and the social impacts of farming and food production.

Finally, we are excited to announce the launch of **The Shadowed Road 2.0**, coming this April. Now tablet and mobile device friendly. It features a new interactive format, updated teacher resources, and enhanced teacher admin. It's also fully bilingual in English and French. If you haven't signed up for a trial, do so at _www.theshadowedroad.com_. It's FREE. And if you've already tried the first version, we invite you to try the latest version too.

Until next time,

Lisa Tran,
Associate Editor
@teachmag

field trips

Sustainable Farming

From the farm to the table, with the classroom in between. Many farms across Canada follow organic practices and use natural methods to keep the soil fertile instead of chemicals. They welcome visitors to come and learn more about sustainable farming and food production. The following are a sampling of such farms that offer educational programs for school groups. Activities include, discussing social and ecological aspects of food production as well as some good, old-fashioned farm work. Alternatively, you can contact your local sustainable farm, many of which welcome visitors for a tour.

FarmWonders at UBC Farms
Vancouver, BC
http://farmwonders.ca

The UBC Farm is a 24-ha integrated production farm that grows and cultivates over 200 varieties of fruits, vegetables, and herbs. In 2003, in partnership with the Faculty of Education, the farm began providing opportunities for elementary school students. Visiting classes would start their own garden and return to tend to them in the summer months. They would work together with volunteer farmers. Today, the educational program at WonderFarms has grown. Every spring and autumn, UBC Farm offers field trips for every age group. Students can tour the farm and visit different educational stations to learn about topics such as annual plant life cycles, basic soil science, organic farming, and the role of farms in our food system. As well, local and global topics may be covered for example, food security, and sustainability.

Growing Up Organic
Ottawa Region, ON
http://cog.ca/ottawa/growing-up-organic

Growing Up Organic is a garden- and farm-based educational program for children and youth, provided by the Canadian Organic Growers association in the Ottawa region in partnership with All Things Food and Eastern Ontario Agri-Food Network. Although the group's main focus is to provide teachers with the tools, resources, and workshops to create school gardens, they can also help educators identify suitable local organic farms for field trips. While at the farm, students harvest food to bring back to the classroom where they can prepare a meal with a local chef or nutritionist.

ManoRun Farm
Lynden, ON
www.manorun.com/index.php

ManoRun Farm is family operated and located in Lynden, Ontario. The farm produces a variety of vegetables that are sold at local farmer's markets and directly to families through a community food share initiative. ManoRun also offers an educational program for school groups called The Cycle of a Farm. The four activities teach students the value of local sustainable food, as well as organic farming. They include a discovery walk through the sustainable fields and interacting with livestock to learn the animals' role in our diet and soil fertility.

CODE BREAKERS

The ABC's of Digital Education

by Meagan Gillmore

There's a greater push to teach kids computer coding at school. But you don't need to be a technology whiz to introduce it to your students. Here's how some teachers are bringing coding to their classes—and how you can do the same.

A plumber from Brooklyn lies next to a racetrack.
His vehicle—smashed. The audience—shocked.
His condition? Unknown.

A few Toronto children could determine whether he lives or dies. Their task: "*Check if Mario is dead.*"

This isn't a CPR class. They're learning visual basic, a computer programming language developed by Microsoft. They're practising with the game Mario Kart as part of classes run by Real Programming 4 Kids.

"That's a key part of my day," Real Programming 4 Kids' co-founder Elliott Bay, remarks as he reads the instructions. He never envisioned he'd run a business that teaches children computer coding by using video games. In the 1990s, he ran a math tutoring business in Winnipeg. His business partner, a programmer, put a beer down on a PacMan machine in a bar and said, "I could teach kids to program this." They started Real Programming 4 Kids years before organizations like the U.S.-based Code.org introduced Hour of Code, an initiative to have students spend at least one hour coding in December during Computer Science Awareness week.

In 2000, Real Programming 4 Kids expanded to Toronto. It now only operates in Ontario and has classes throughout the province. Many students have become programmers;

most teachers *are* alumni. But what students learn applies to more subjects than just computer science, says Bay. Programming computer games builds math skills—plotting characters' movements requires geometry. Making jumps realistic uses physics. Most importantly, games make learning fun, says Bay.

Still, learning computer coding is serious. Few skills are as essential to children's lives as coding, or computer programming. Computer code is the language computers speak. It's how they receive instructions to operate. Because much of children's activities—and social interactions—involve computers, learning to code is as crucial as learning to read and write.

"The importance of computer programming is literacy," explains Kate Arthur, co-founder of Kids Code Jeunesse, a non-profit that helps teachers incorporate coding into their classes. A few years ago, she realized her inability to code limited her communication—despite her literature degree and communications background. "We're not expecting everyone to be computer programmers," she says of the organization's goals. "It's just making (students) aware of it.

Not everyone's going to become the next Bill Gates and the next James Joyce."

But all students need to understand how computers and the Internet work. Many think the Internet is Google, says Arthur. Adults expect kids to live in a digital world, but children don't always know how this digital world is made, or how it works.

"It's important for them to know there's information behind what they're seeing," explains Debbie Adams, an elementary science and technology teacher in Montreal. "You don't just press a button. There are ways where you can take control and create your own buttons."

How students should learn to make these digital "buttons" is debatable. Businesses and not-for-profits offer classes and teaching resources, but many schools don't provide coding instruction. It's not mandatory in Canadian elementary schools. Some high school electives include coding. This doesn't mean schools don't want to teach coding. It may not be an option for them. Budget constraints make it hard to keep up with ever-changing technology. Teachers may not have enough time in their day to teach computer coding. They may not know how to code.

But teachers don't need to break a code to teach code. Another set of ABC's: accessibility, bravery, and creativity, can help them teach students to code, and learn it themselves.

Coding applies to virtually any subject. Arthur doesn't think it should be part of computer science. Not all students take those courses. Kids Code Jeunesse has developed curriculum, in French and English, which coincides with Quebec's educational goals. Coding involves making plans to solve problems, breaking something complex into simple steps. This is useful in math and science, as well as literature and social studies. Coding gives students another communication tool. Programs like MIT's Scratch, a visual-based program that helps people make animated projects, are like pencils and markers for writing on digital Bristol boards. Adams knows of students who have presented animal classification information in science class using computer coding and web design.

Coding can engage more reluctant learners. Students with learning disabilities, especially those that impact spelling, may find coding an easier way to communicate. The Internet has allowed people from underprivileged communities start their own businesses. Coding can help them do this. To help as many people as possible learn, Kids Code Jeunesse plans to translate its materials into many Aboriginal languages.

Coding can also help high-achieving students learn to handle failure, explains Seema Ali, a high school math and computer teacher in British Columbia. Learning something new can be scary, especially for students who

may feel expected to always know the answers. Coding can be done independently with the computer, not with a teacher watching. "It allows them to try something out, and if it doesn't work, go back, and try it again," explains Ali. "Nobody has to know (they made a mistake)." Students learn resilience by trying different solutions, she says.

Separating coding from computer science isn't just good for students. It's also good for teachers. Most haven't studied computer science, explains Graham Rich, a teacher in Hartland, NB. His computer science degree makes him an exception. He's been introducing students to coding for years. Rich uploads tutorials of his lessons to YouTube, linking them to his personal website where teachers can learn from his mistakes and successes.

Although he's experienced, he still wants to learn. He'd like a central place with teaching resources that shows how coding connects to curriculum, he says.

Manitoba educators may be granting his wish. David Wall, educational technology consultant at Pembina Trails School Division, has been encouraging schools to improve how they teach kids coding for several years.

"You would not question someone about learning French or English," he says about the reluctance some schools have to teaching programming. "So why coding? I

> **Because much of children's activities—and social interactions—involve computers, learning to code is as crucial as learning to read and write.**

think it's because it's a language we don't understand."

Students can learn this language. "It's not a university-level interest. Kids in Grades 4 and 5 can do this," Wall says. "They can write English, they can write French, they can write Punjabi, and we don't trust them to write code."

As more teachers asked him questions about computer programming, he realized they lacked teaching resources. Wall, and others, began creating a continuum that makes high school coding expectations relevant to elementary school teachers. He hopes it will be available by September, in a format all teachers can access, he says.

A specific coding curriculum for elementary schools isn't necessary, Wall says. Curriculum can take a long time to make or revise. That's a challenge with instant digital communication and constantly changing devices. With curriculum, Wall explains, a student's grade level determines what they learn. With a continuum, their skills determine what they learn. Students in the same grade could be at different places on the continuum. Wall would like to see coding included in curriculum as a continuum

on which teachers are required to report.

For students to learn, teachers need to be brave. "I was the stereotypical adult who felt like coding and computer science was a really scary, advanced skill that only the top-notch programmers would be able to acquire," says Leah Obach, a Grade 2 teacher in Hamiota, MB. She began learning coding a couple of years ago. For Hour of Code, her students helped younger students code. In the classroom, they have created posters using coding. Students can also code during independent activity time; it's particularly popular during indoor recesses, she says.

The best—and hardest—thing teachers can do is ask students for help. "Realize you're probably going to learn more from your students than you will on your own," Rich explains. Students become leaders this way. It can help unlikely students find recognition. "There's no team for coding," explains Wall. It's not as "glamourous" as athletics. But when a coding project earns praise, it can be like winning a championship, he says.

Teachers can't solely rely on students' interest—they need to be creative. Technology won't always work; devices may be limited. Students need time away from screens. The Canadian Paediatric Society recommends children older than five spend less than two hours a day using screens for leisure activities. Play and socialization should involve

> **The best—and hardest—thing teachers can do is ask students for help.**

physical activity. Using computers for learning is fine, "as long as we don't ignore the fact that there's people in the room," says Dr. Stan Lipnowski, a Manitoba paediatrician who has written about health concerns of increased inactivity. Teachers can have students take regular walks and discuss what they're learning, he suggests.

Balance is crucial, says Obach. She teaches with guided reading and project-based learning. Students can't always choose technology-based activities. There's technology-free time each day in class, she says.

Teachers need to engage students' creativity to teach coding. Algorithms or theory aren't interesting. "They just want to solve a problem," Rich says. This often means making a game. Nearly 10 years ago, he introduced Python, a text-based code, to a group of Grade 10, non-computer science students. It wasn't as successful as he hoped. He had the students use it to make a calculator. "It was a really cool calculator—it had green backgrounds and purple backgrounds and pink backgrounds," he remembers. "But it was still a calculator, so there was no joy in making it." They would have learned better by making a game, he says.

When his students learn the theory behind coding, it
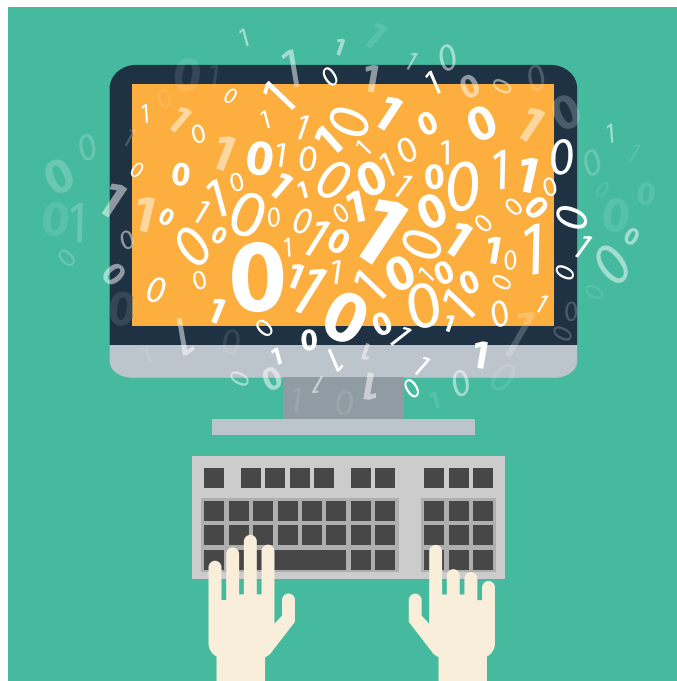
occurs almost "by happenstance," Rich says. Because they learn it while doing something, he often has to tell them they know the theory—and should remember it for tests.

If the Real Programming 4 Kids students are any indication, that approach works. Harry, a Grade 4 student who recently began classes, says learning code could help him become a businessman. But his first priority isn't landing promotions. He wants to reach higher levels in the game Minecraft. To get there, he needs new weapons. He needs to learn to code to make them. "That's really my goal this year," he says.

Meagan Gillmore is a freelance writer in Toronto, ON and recent graduate of the Publishing: Book, Magazine and Electronic Program at Centennial College.
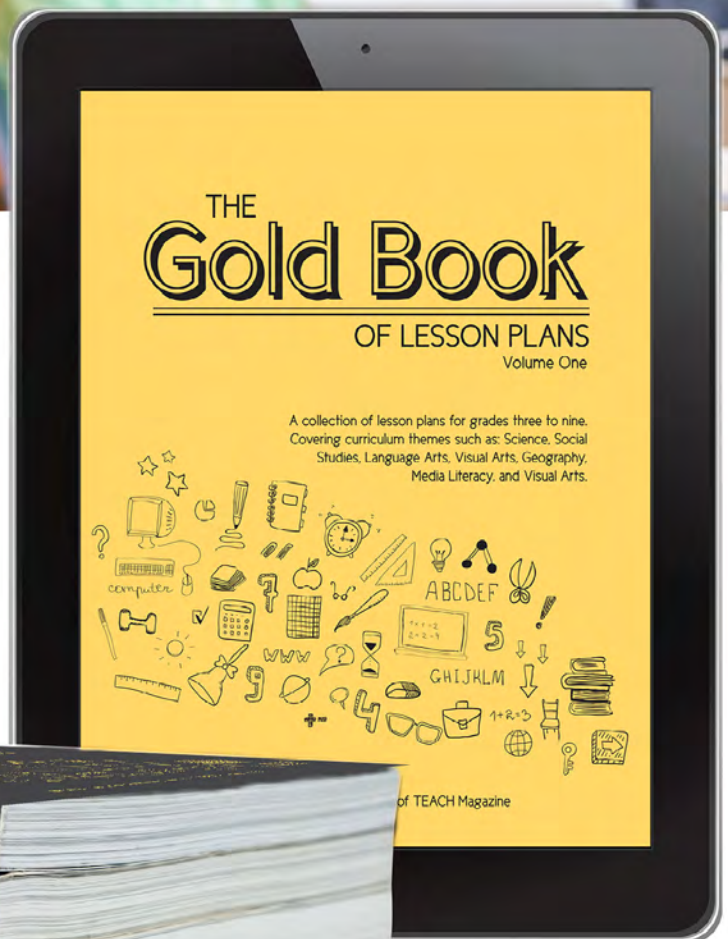
FINDING HOPE IN GENOCIDE
How I Taught the Rwanda Genocide

by Bill Gowsell

The Catholic District School Board of Eastern Ontario introduced a new theme for the 2013-2015 school years: *Witnesses to Hope—Remembering, Celebrating, Believing*. This theme inspires us to bring hope to those in need, whether a country on the far side of the world, or one person in our school community. It is also meant to inspire us to develop or enhance our appreciation and knowledge for people of hope. With the approaching 20th anniversary of the Rwanda genocide in April 2014, I took this as an opportunity to teach my students about the genocide.

There really is no particular set of texts that tell you how to teach genocide so I began by talking about my own experience. As a 14-year-old kid, I watched the nightly news as General Romeo Dallaire, a Canadian and the Commander of the United Nations Peacekeeping Forces, described the bloodshed and violence that filled the streets of Kigali, the capital of this small central African nation. General Dallaire wanted to intervene in the conflict and pleaded with officials, but was told that was not the mandate of his mission.

The class remained quiet as we started our unit. They listened intently and asked valid questions. They were old enough to wonder and question why people would be so cruel, and why so many nations did little to help.

I wanted to bring my students to Rwanda and the best means came through Google Maps. There was no Street View available, but with the satellite view, we saw the streets and 'toured' the city. It seemed that almost everywhere on Google, there were tourist photos posted so my students were able to view high resolution pictures of places like the Hotel des Mille Collines, a UN

safe site during the genocide. We also found the Kigali Genocide Memorial, which led us to their homepage (*www.genocidearchiverwanda.org.rw/index.php/Welcome_to_Genocide_Archive_Rwanda*). Here, the facts of the atrocities are explained clearly and you can watch testimony from survivors.

To understand any historic moment, you need to know the people involved. The next step involved visiting *www.rwanda-genocide.org*. Here, we learned about the events that led up to the slaughter, the people involved, and what was happening now. We learned about General Dallaire's role and about Paul Kagame, the leader of the RPF rebel group and now President of Rwanda. We learned why General Dallaire and the UN were in Rwanda in the first place; they were trying to enforce the Arusha Accords designed to maintain peace after a civil war plagued Rwanda for years.

There is no greater way to establish a personal connection to an event than with a guest speaker who lived through it. I've had experience booking guest speakers around Remembrance Day through *www.thememoryproject.ca* so I tried to book General Dallaire. I was moved by his book *Shake Hands with the Devil* and the documentary about his return to Rwanda after the genocide. Unfortunately, his busy schedule did not permit a visit, but his office suggested I contact Major Brent Beardsley instead. Major Beardsley was the co-author of General Dallaire's book and served with him in Rwanda during the genocide. His own personal knowledge from serving in Rwanda would make for a compelling class visit. So I emailed him, and after a few weeks of correspondence we settled on a date at the end of April.

The week of Major Beardsley's visit, my class buzzed with anticipation. Many students had researched him online and told me facts about his career. Most of these eager students were often the 'hard to motivate' types. The class was particularly amazed at how the members

of the UN and the citizens of Rwanda coped with being undermanned and unprotected. We talked about how beautiful the land was and how a country heals itself after so much bloodshed. Major Beardsley would provide a wealth of information and perspective that eluded any Google search.

My class comprised of 29 students, 21 of which were boys, 20 of whom were on Individual Education Plans. Multiple students were constantly restless and often required fidget toys during lessons. I wasn't worried about their behaviour during our guest speaker's presentation, however. We openly discussed appropriate behaviour and what they could do to alleviate the need for movement. Changing our seating plan and allowing more space for stretching their

> **To understand any historic moment, you need to know the people involved.**

legs was an idea that came right from the students.

Finally, the day had come. Major Beardsley towered over my students, but his friendly nature and direct manner hooked them immediately. He used my Smart Board to display his PowerPoint presentation and started off by showing various pictures from Rwanda, including the cemeteries devoted to those murdered in the genocide as well as general pictures of the country. He took us through the complicated history of how the people of Rwanda were divided into two groups during European colonization, the Hutu's and the Tutsi's. One group in Rwanda was told they were above the other, leading to hatred and mistrust amongst the two groups.

Tutsi's were given power by European colonizers. However, years of abuse of power and oppression of the Hutu majority led to violence and the eventual ousting of the Tutsi leaders. Hutu extremists were worried about Tutsi control of the country after the Arusha Accords; a plan was concocted to eliminate the threat of the Tutsi's. By April of 1994, local radio stations in Rwanda would broadcast coded instructions dictating how loyal Hutu's would be able to eliminate the Tutsi "cockroach." Mass murder had been organized on public radio. Major Beardsley and the other members of the UN mission heard these announcements and tried to save as many people possible while Rwanda tore itself apart.

My students were absorbed by Major Beardsley as he talked about the slaughter that occurred over the 100 days in 1994. He talked about the people and the loss that Rwanda experienced. He described the horror he witnessed and the terror of life in Rwanda after the genocide began. He structured his presentation to answer questions as they came up. I thought that was very helpful to students

because what they may have been wondering at the moment wouldn't be forgotten at the end. We all asked questions, myself included.

The schoolroom example Major Beardsley cited, illustrated the cloud of terror under which so many citizens of Rwanda lived. "Imagine if a group of men burst into this classroom with machetes, lined up those five kids and said, kill them. If you say no then, this group of men will kill you and find someone else to do it. If you do it, are you actually murderers? Do you really have a choice?" These questions from Major Beardsley forced us to reflect on our earlier discussions about how so many people could be inclined to kill on such a mass scale.

From Major Beardsley, we also heard about the actions of the underfunded and under-resourced UN mission in Rwanda. He told us about the average people he met who worked hard to protect others during the slaughter, and the effect the mission had on the soldiers.

We later researched the reconciliation in Rwanda following the genocide. Visiting sites like _www.un.org/en/ preventgenocide/rwanda/about/bgjustice.shtml_ helped us see the growth that has taken place in Rwanda since the tragedy. Courts and programs have been established to hold those who organized and perpetrated the mass murders accountable and bring reconciliation to the families of the victims and the survivors.

One of the final questions asked of Major Beardsley focused on what we as a class should remember about the genocide in Rwanda. He told us that hate is a strong word to use, and something that we should avoid putting in our

> **There is no greater way to establish a personal connection to an event than with a guest speaker who lived through it.**

vocabulary. It is the all-powerful word that invokes violence and terror, like what happened in Rwanda. We should love and care for others as we would hope for ourselves. The world had turned a blind eye to the countless slaughter of innocent lives, yet there were still people who sought to bring hope to the despair, from the survivors to the UN soliders.

We read, researched, and heard from a person who witnessed the genocide. We had the chance to see a country at its worst. Now, just twenty years later, there is growth and new direction in Rwanda—there is still hope.

For the last eight years, Bill has worked with the Catholic District School Board of Eastern Ontario. Currently he is teaching grade 6 in Brockville and has recently completed his specialist in Primary/Junior Mathematics.
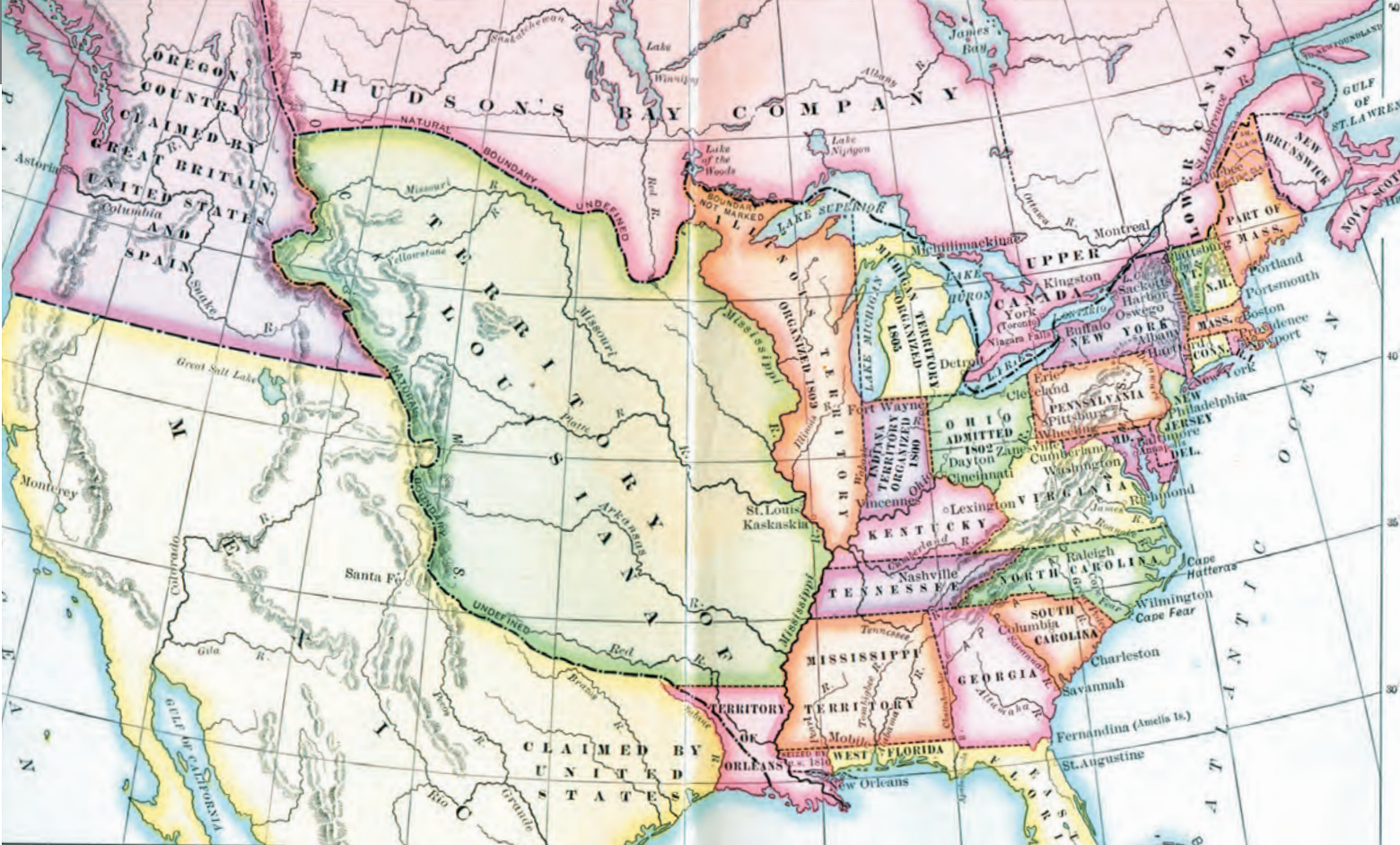
CURRICULA

The following is a lesson plan excerpt from *The Ruptured Sky*, a graphic novel and digital literacy title. To see the full lesson plan or to learn more, please visit **www.therupturedsky.com**.

CURRICULUM LINKS

Language Arts,
History

ABORIGINAL WORLD VIEWS AND BIOGRAPHIES OF 1812: LESSON THREE

The Ruptured Sky looks at the War of 1812 from a contemporary time frame. Two First Nations teenagers, Chris and Angie, are working on a school project about the war. Chris' grandfather, John Montour, figures that the teenagers might like to hear about the events of the war directly from a group of First Nations elders. As each of the elders relates part of the story of the War of 1812, the people, places, and events come to life. Chris and Angie experience the war through these important stories. They hear firsthand about the great Shawnee war chief, Tecumseh, the Mohawk War Chief, Joseph Brant and his protégé, John Norton to name some. They come to understand how important the role of First Nations warriors was in key battles such as the taking of Fort Detroit, Beaver Dams, and Queenston Heights. Chris and Angie learn this story of long ago is still evolving, that the events of history still resonate and influence events of today. In the end, the story is theirs to continue.

Overview

Throughout this lesson package, students will analyze, synthesize and evaluate historical information through studying the graphic novel The Ruptured Sky. Students will further develop their current schema of Aboriginal People's perspectives, and Early Canada during the War of 1812. Students will identify achievements of significant people, timelines, and battles that affected Aboriginal identity and Early Canadian History. Finally, students will demonstrate their learning through the creation of a magazine spread as their final performance task.

Key Concepts

Students will explore the following concepts:
• Analyzing and evaluating the graphic novel
• Understanding Aboriginal world views
• Exploring new vocabulary and concepts relating to the First Nations of North America
• Developing a solid foundation for the future learning of the War of 1812, by synthesizing information regarding key people, places, and events

Skills
• Research skills
• Creative thinking skills
• Interviewing Skills
• Communication and Information Technology Skills
• Cooperative Learning Skills

Time Required

Each lesson step may take one or two class periods, including watching a movie, and the performance task, for a total of ten lesson periods to complete this package, based on student needs.

Lesson Steps

Step One   The Graphic Novel, The Ruptured Sky — The Mohawk Creation Story
Step Two   The War of 1812 – Battle Timeline
Step Three   Biography of an Historical Icon
Step Four   Researching Articles on Significant Battles
Step Five   Performance Task: Magazine Spread

Blackline Masters

#1   Movie Notes Handout/Retell Handout
#2   Timeline Handout
#3   Interview Process Template
#4   Biography Template
#5   Biography Rubric
#6   Key Battles Template
#7   Battle Article Template
#8   Battle Article Rubric
#9   Performance Task Criteria
#10 Performance Task Rubric

Appendices

Appendix I   Teacher Checklist

Materials Required

For Teachers
• See Suggested Resources document
• Teacher Checklist (Appendix I)
• Computer, document camera

For Students
• Copy of The Ruptured Sky
• Access to a computer, if possible
• India Ink and Feathers (optional)

CURRICULUM EXPECTATIONS

Overall Curriculum Expectations

The overall expectations listed below serve as an entry point for teachers. Teachers are encouraged to make connections to specific expectations in their region and grade.

English Language Arts

Listening
Identify a range of purposes for listening in a variety of situations, formal and informal, and set goals appropriate for specific listening tasks (e.g., to analyze the arguments on both sides of a class debate; to create a character sketch based on a sound clip from a film or an audio-tape of an interview; to synthesize ideas in a literature circle).

Speaking
Develop and explain interpretations of oral texts using stated and implied ideas from the texts to support their interpretation.

Teacher prompt: "Explain what evidence you used to determine the theme(s) in this oral text."

Reading
Read a wide variety of increasingly complex or difficult texts from diverse cultures, including literary texts (e.g., short stories, poetry, novels, mysteries, historical fiction, autobiographies, scripts, lyrics), graphic texts (e.g., graphs and graphic organizers, charts and tables, diagrams, surveys, maps), and informational texts (e.g., print and online encyclopedias, manuals, and magazine and newspaper articles; magazines in their first languages, where appropriate; electronic texts, textbooks, and non-fiction materials; a variety of dictionaries, thesauri, and websites).

Analyze a variety of text forms and explain how their particular characteristics help communicate meaning, with a focus on literary texts such as a novel (e.g., the realistic portrayal of imagined characters and actions helps the reader become involved in the story), graphic texts such as a photo essay (e.g., the pictures and captions together communicate much more than they could separately), and informational texts such as a manual (e.g., the use of headings, numbered steps, and illustrations makes the procedures easy to follow).

Analyze increasingly complex texts to identify organizational patterns used in them and explain how the patterns help communicate meaning (e.g., a question-and-answer format in a report or article; groups and subgroups in a table or web).

Writing
Gather information to support ideas for writing, using a variety of strategies and a wide range of print and electronic resources (e.g., use a timeline to organize research tasks; interview people with knowledge of the topic; identify and use appropriate graphic and multimedia resources; record sources used and information gathered in a form that makes it easy to understand and retrieve)

Establish a distinctive voice in their writing appropriate to the subject and audience (e.g., use language that communicates their "stance" or point of view on an issue and identify the

words and/or phrases that help them achieve this goal).

Media Arts
Explain how various media texts address their intended purpose and audience

Interpret increasingly complex media texts to understand both overt and implied messages.

Produce media texts of some technical complexity for specific purposes and audiences, using appropriate forms, conventions, and techniques a multimedia presentation.

Demonstrate understanding that different media texts reflect different points of view.

Identify different perspectives presented explain differences in perspective.

Identify perspectives.

Produce a variety of media texts of some complexity for various purposes and audiences.

History
Identify and explain examples of conflict and cooperation between the French and First Nation peoples (e.g., with respect to the fur trade, religion and culture, military alliances/conflicts).

Analyze, synthesize, and evaluate historical information from different points of view (e.g., First Nation peoples' ideas about spirituality and Jesuit ideas about religion).

Use appropriate vocabulary to describe their inquiries and observations.

Formulate questions to aid in gathering and clarifying information (e.g., How did the Catholic Church influence the life of First Nation peoples and French settlers in New France?).

Use a variety of primary and secondary sources to locate relevant information about how early settlers met the challenges of the new land (e.g., primary sources: artifacts, journals, letters, statistics, field trips, interviews, period documents and maps; secondary sources: maps, illustrations, print materials, videos, CD-ROMs, Internet sites).

Analyze, synthesize, and evaluate historical information (e.g., debate the question: Who won the War of 1812?).

Describe and analyze conflicting points of view about a series of historical events (e.g., the Royal Proclamation of 1763, the Quebec Act of 1774, the Declaration of Independence of 1776, the Indian Act of 1876).

Prepare and present a biographical sketch of a historical person from the period 1759-1812 (e.g., Laura Secord, Isaac Brock, Tecumseh, Thomas Peters).

Describe the major causes and personalities of the War of 1812.

Describe the impact of the War of 1812 on the development of Canada (e.g., defense related construction as in Fort Henry and the Rideau Canal; the movement of the capital to Bytown [Ottawa]; the emergence of national pride; the building of roads such as Kingston Road and Yonge Street; the shipping industry in the Maritimes).

Identify the achievements and contributions of significant people (e.g., Sir John Graves Simcoe, Lady Elizabeth Simcoe, Joseph Brant/Thayendanegea).

STEP ONE:
The Graphic Novel The Ruptured Sky — A Mohawk Creation Story

Background Information

- Teacher should establish the checklist for organizational purposes.
- Teacher should spend some time navigating the websites to ensure fluency during lessons and bookmark for ease of reference.
- Assume the students have already read the graphic novel for this lesson.

Materials Required

For Teachers:
- Teacher should establish the student checklist as an organizational assessment tool to record completion of student assignments

- Example of an Ojibwe Creation Story *www.youtube.com/watch?v=cX4GJTtSigY*

For Students:
- Copy of *The Ruptured Sky*
- Writing notebook/paper for lesson assignments
- Chart paper, markers, tape, etc.

Teaching/Learning Strategies

Part A

Establish Learning Goals with your students: Have you ever wondered how the earth actually started? The next lesson will focus on gaining a deeper understanding of "Aboriginal worldviews" through the study or oral histories from a variety of media forms. We will also discuss which media form seemed to do a more effective job of explaining how the earth began.

Read The Ruptured Sky aloud with students, or have them read independently.
Ask comprehension questions and answer student questions.

Watch the following web-clip with the class, as an example of an Ojibwe Creation Story, told through media. Explain that traditionally, creation stories were taught to children through oral story telling. These stories took days to tell, and they were passed down from generation to generation. *www.youtube.com/watch?v=cX4GJTtSigY*

With students, brainstorm and create a list of criteria to determine which media form provided a more effective job in explaining how the earth began. Again, ask the question, which media form seemed to do a more effective job of explaining how the earth began?

On chart paper, or chalkboard, etc., write the criteria at the top, and determine which media form meets the criteria. Post as an anchor chart.

Part B

Read the following passage from Basil Johnston's book, "Ojibwe Heritage." Provide students with a copy, for those students who require visual materials.

CREATION

Young and old asked:

Who gave to me
The breath of life
My frame of flesh?
Who gave to me
The beat of heart
My vision to behold
Who?
When to rose the gift
Of shade, of beauty
And grace of form?
When to Pine the gift
Of mystery of growth
The power to heal
When?
How to bear the gift
Of sense of time
A place of wintering?
How Eagle came to the gift
Of glance of love
The flash of rage?
How?
Who gave to sun
His light to burn
His path to tread?
Who gave to Earth
Her greening bounty
Cycles of her being?
Who?
Who gave to us
The gifts we do not own
But borrow and pass on?
Who made us one?
Who set the path of souls?
Who carved the Land of Peace?
Who?

As the young asked, the old men and old women thought about these matters. They gave their answers and explanations in the form of stories, songs, prayers, rituals, and ceremonies.

Then read the following quote to students from Basil Johnston's very first paragraph of his book, "Ojibwe Heritage." Provide students with a copy, for those students who require visual materials.

If Native People and their heritage are to be understood, it is their beliefs, insights, concepts, ideals, values, attitudes, and codes that must be studied. And there is, I submit, no better way of gaining that understanding than by examining native ceremonies, rituals, song, dance and prayers, and stories. For it is in ceremony, ritual, song, dance and prayer that the sum total of what people believe about life, being, existence, and relationships are symbolically expressed and articulated; as it is in story, fable, legend, and myth that fundamental understandings, insights, and attitudes toward life and human conduct, character and quality in their diverse forms are embodied and passed on.

After reading this passage, pose these questions to the students to promote critical thinking:
- Why is it important to understand the worldviews of Aboriginal People?
- How does understanding Aboriginal connections to the land and each other help us to understand Aboriginal perspectives about war?
- How can we better understand Aboriginal worldviews? What can we do to share our learning with others?

Remind students that everyone has a unique perspective, and that everyone has a responsibility of becoming a global citizen, which includes life long learning about the world around us, as well as the sharing of this learning. One way to share information is through media. Watch the following video clip with students. Remind students, this is only an example of how one student demonstrated their learning through media and story telling. The Nation of this legend is unknown. ***www.youtube.com/watch?v=Uy20tkW eRHY&feature=endscreen&NR=1***

Encourage students to brainstorm a list of theories that they know of, either scientific or cultural, on how the earth began, building on their previous learning, and from the reading of *The Ruptured Sky*. Encourage students to share their brainstorming ideas with their classmates. Facilitate a "know, wonder, learn" session with the whole class. Compare this creation story to other creation stories of the world, or their own cultural creation story.

Finally, discuss options for the culminating task with the students. Perhaps students will have ideas in regards to how they celebrate their learning at the end of this lesson package.

STEP TWO:
Timeline of the War of 1812 —
Featuring The PBS Movie Special

Materials Required

For Teachers:
• Timeline of War of 1812
  www.warof1812.ca/1812events.htm
• Official War of 1812 *www.visit1812.com*
• MOVIE: War of 1812 PBS -2011
  http://video.pbs.org/video/2089393539 (90 minutes)
• A free account on *Prezi.com* as an option to create a
  timeline

For Students:
• Movie Notes/Retell handout (BLM #1)
• BLM #2 Timeline student handout
• Timeline of War of 1812 –
  www.warof1812.ca/1812events.htm
• A free account on *Prezi.com* as an option
  to create a timeline

Teaching/Learning Strategies

Part A

War of 1812 PBS Movie 2011
Available online at *http://video.pbs.org/video/2089393539*
(90 minutes)

Before the movie screening, mention to students that the
perspectives of the information they may embark on may
vary, because the authors may have different perspectives,
or may have conducted different research to produce these
materials.

Hand out the Movie Notes Handout (BLM #1) two pages per
student, and the timeline handout (BLM #2), and encourage
students to record their thinking during the screening of
the PBS Special. Have them highlight any questions they
may have. Inform students that after the movie is finished,
they will be asked to write a one-page retell, sequencing
the events from the movie to the best of their knowledge.

Play the movie. Hand out another copy of the Retell
Handout (BLM#1). Provide students with ample time to
draft/edit/revise/publish the written retell. Students may
also choose to generate their retell on the computer.

Part B

Have the students use their notes from the movie and
other websites as needed, to complete a Timeline. Students
may use a template of their choice to create a timeline,
or they may create an account on Prezi.com to utilize an
existing timeline template. Discuss their questions and
comments. Assist students in using the website if needed.
Allow ample time to complete this assignment.
Finally, have students submit their Movie Notes page,
the one page retell, and Timeline page to check for
understanding. Provide descriptive feedback, and use
the Teacher Checklist to track completion of student
assignments.

Literacy Extensions

Students may go back to their timeline and add more
significant dates to the timeline, and gather pictures from
the Internet to accompany their timelines.

STEP THREE:
Biography of an Historical Icon

Materials Required

For Teachers
• Access to a computer
• Blackboard, or chart paper and markers
• Biography Rubric (BLM #5)
• A Copy of The Ruptured Sky
• War of 1812 website:
  www.eighteentwelve.ca/?q=eng/Topic/6

For Students
• Copies of *The Ruptured Sky*
• Interview Process Template (BLM #3)
• Biography Templates (BLM #4)
• Access to the Internet

Part A

Establish Learning Goals with Students: Imagine you are
a journalist and your job is to interview war veterans from
the past. Take yourself back in time to the War of 1812, and
imagine you are interviewing one key person from the
Graphic Novel. You are going to complete the Interview
Process Template (BLM #3). Complete the interview process
page, and then write a brief biography of this key person.
Choose from the following list: Tecumseh, Joseph Brant,
Isaac Brock, Laura Secord, Molly Brant, George Prevost, or
one of the Generals or Soldiers.

Hand out the Interview Process Template to all students. On chart paper, or the blackboard, review it with students and brainstorm further ideas regarding interviews, including the kinds of questions you might ask someone who is going to war, someone who has just returned from war, or their opinions of war.

Consider the following criteria for asking interview questions to a variety of people:

- Keep the interview questions clear and short
- Don't ask "yes or no" questions instead ask "how, when, and why" questions
- Try to keep your personal opinions out of the interview
- Encourage the interviewee with nods of the head rather than audible responses such as "yes" or "uh huh" that will be recorded (if an audio recording)
- Be patient and provide the interviewee with time to reflect before asking another question
- Use follow-up such as: When did that happen? What did you think/feel about that?
- Prior to the interview, ask the interviewee if they have photographs, personal letters or memorabilia to enhance the experience.

What kinds of interview questions might you start with?

Perhaps establishing the basics, such as:

- Please state your name, date of birth (instead of the question of how old are you?), and your hometown.
- What war did you fight in?
- What was your first thought when you heard of the war/ heard you were going to be in the war?
- Did you write letters to loved ones? What did you write about?
- What were the living dwellings like? What was the food like? What was it like to wear uniforms, were they heavy?
- Questions about weapons?
- What was the biggest challenge in the war—living or fighting in the war?
- What is the first thing you did after the Treaty of….. was signed?
- Questions about the signing of a treaty.

Then, encourage students to use the Internet and peer discussions to complete their brainstorming on the Interview Process Template. Allow students time to practice interviewing skills.

Part A

Look at the following website and read an example of a biography of Tecumseh with the students, so students have an idea of what a brief biography might look like.

www.eighteentwelve.ca/?q=eng/Topic/6

Hand out Biography Template (BLM #4), and review with students. This will help guide their thinking as they write their rough drafts.

Strategy Suggestions:
- Have students work in pairs if needed
- Have discussions with small groups
- Encourage peer discussions
- Encourage questioning and reasoning
- Provide ample writing periods for the drafting, revising/ editing and publishing process

Finally, Have students submit all artifacts of learning, and evaluate their biographies using the Biography Rubric (BLM #5).

Literacy Extension

Have students recreate their biographies in a multi-media computerized form.

To view this lesson plan in its entirety, please visit *www.therupturedsky.com* for more information.

World Geography

The lone classroom globe or heavy set of atlases used to be the best resources for world geography, but now the world is literally at your fingertips with modern-day maps. Below are some interactive websites and apps that can take you around the world without having to leave your front door.

Amazing World Atlas
www.lonelyplanet.com/kids/apps-and-games

Kids may not be old enough to go off the beaten track and backpack across Europe, but Lonely Planet, the well-known publisher of travel guides, has released an app for kids to explore the world. Amazing World Atlas has five different types of games with over 30 levels of play, including 'Map Blitz' where players match up a flag and place name with its location on the map. For a more challenging experience, users can try 'Map Repeat the Pattern' that has them watch the game light up countries in an order and repeat the pattern correctly to win. And in 'World Matchup,' players compete against the clock to match the flag, animal, or monument to its continent. Purchase this app from the App Store, Google play, and Amazon for approximately $4.

ilearn: Canada
www.jumpermobile.com

Designed by an educator, iLearn: Canada is a fun way for students to learn the names and locations of our provinces and territories. Users can choose from three different modes. In the Learn Mode, they can tap anywhere on the map to see the name of the province or territory and read some quick facts. In Game Mode, students race against the clock to identify as many locations as possible in only a minute. Points are awarded to the fastest times and a leaderboard keeps track of the highest scores. In Test Mode, the clock disappears and scoring is based on the total number of attempts to correctly identify a region. This app is sold at the App store for about $1.

Tiny Countries
www.taptolearn.com

Tiny is a little chick on a big adventure. He's been assigned a mission to travel the globe and stop Dr. Evil, a wayward Rooster, from moving the continents to form a rooster-shaped mega world. This narrative sets the stage for students to test their geography knowledge and decode clues to help Tiny. The app was designed by Tap to Learn and covers 75 countries and over 6 continents. Users will learn about countries, capitals, and famous monuments in an engaging format. Tiny Countries can be purchased from the App Store or Google play for approximately $5.

World Geography Games
www.world-geography-games.com

This free website tests a range of world geography strands in a series of visual and kid-friendly quizzes. Users can learn about continents, countries, capitals, flags, metropolitan areas, and islands among a variety of modes. In countries mode for example, users select a continent on which to focus their geography skills and are presented with its map. They are then asked to identify each country within it and are scored based on the number of attempts. All 193 members of the UN are included, as well as Taiwan, Kosovo, and Vatican City. The website can also be accessed in Dutch, French, German, and Spanish.

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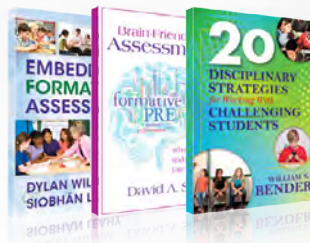
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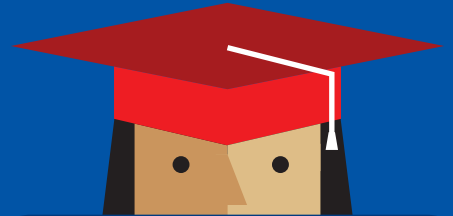
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