TEACH LE PROF
JULY/AUGUST 2015
EDUCATION FOR TODAY AND TOMORROW – L'EDUCATION - AUJOURD'HUI ET DEMAIN

HOW TO MANAGE A DIGITAL CLASSROOM 6

COLUMNS

CURRICULA

The *Solve for Tomorrow* Challenge encourages students to apply Science, Technology, Engineering and Math to a project that could help make their community a better place to live.

We're awarding winning schools with $500,000 in technology products, plus a lab experience with Mitch and Greg from AsapSCIENCE!

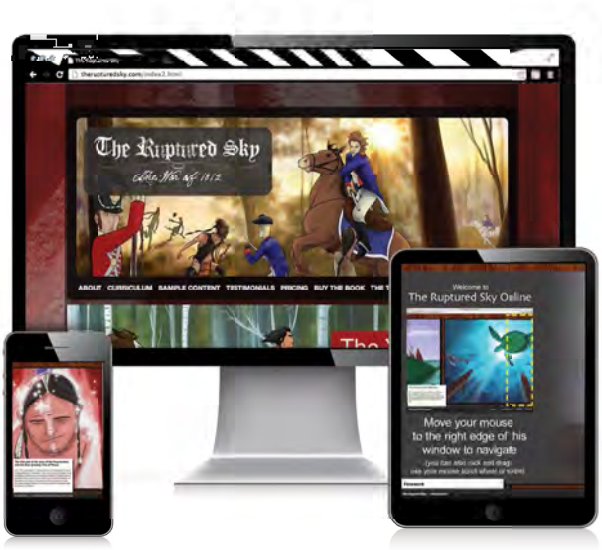
Discover more at solvefortomorrow.ca. | Contest runs September – October 30, 2015.

SAMSUNG SAMSUNG SOLVE FOR TOMORROW

In partnership with: AsapSCIENCE let's talk science inspiring discovery The Learning Partnership PUBLIC EDUCATION. CANADA'S FUTURE.

contents

FEATURES



COLUMNS

CURRICULA

80 DEGREES NORTH

BRING AN HISTORIC TALE OF DISCOVERY AND ADVENTURE INTO YOUR CLASSROOM

80 DEGREES NORTH is a FREE bilingual teaching resource that explores topics of scientific inquiry, examination of Inuit culture, and Canadian sovereignty — all part of the Canadian Arctic Expedition of 1913-1918.

SIGN UP TODAY!

80DEGREESNORTH.COM

TEACH
MAGAZINE

PUBLISHER / EDITOR
Wili Liberman

ASSOCIATE EDITOR
Lisa Tran

CONTRIBUTORS
Tara Davis, Edgar Rider,
Anita Townsend

ART DIRECTION
Kat Bezner

DESIGN / PRODUCTION
Studio Productions

EDITORIAL ADVISORY BOARD
Bernice Slotnick
Teacher (retired)

John Myers
Curriculum Instructor,
Ontario Institute for Studies in Education/
University of Toronto

Rose Dotten
Directory of Library and Information
Services, University of Toronto Schools
(Retired)

www.teachmag.com

We interrupt your regularly scheduled holiday for this important message: TEACH is back for our first ever summer issue!

Last time, we profiled some teachers and asked about their summer plans. Although they each discussed unique interests and vacations, they all shared one common view: planning never stops, even over the break. So, in this inaugural summer edition, we present articles that can help organize your lessons and classroom because before you know it, that first bell will ring and things will be back in full swing.

The once traditional model of teaching saw the teacher as the only source of knowledge. Today, however, students are at the centre of their learning supplemented with the use of devices and interactive media. But there's much more to using technology than simply handing students each an iPad and saying, "Go!" As we transition into a new teaching and learning model, Anita Townsend, educational technology consultant and former educator offers tips on managing and organizing your digital classroom. How should you facilitate the learning? What are some examples of instructional approaches? Read on to learn more.

It's 8:25 AM and there are notes left in the classroom. No plans at all. You scramble around the room trying to prepare. How will you manage? Many of us have been there, a day of substitute teaching. Often the regular teacher leaves comments, lesson plans, and activities, but in the case of unexpected absence, the substitute teacher is left on their own. Our second contributor is Edgar Rider, who has been substitute teaching for almost a decade, and recounts his trials and tribulations. He offers many anecdotal and practical suggestions—some quite humorous—on surviving the day. What would you do if your entire PE class disappeared or a group of students set the washroom on fire? Well, it has happened to Edgar. Check out this piece to find out how he managed.

At the heart of current teaching is inquiry-based learning, where the teacher acts more as a facilitator or coach. This method often does not include traditional lectures or even textbooks. Math can often be a challenging subject because often, we ask students to memorize, mimic, perform, and apply computational skills to abstract concepts. But what if we asked students to do more? What if we asked them to engage and inquire? In **Classroom Perspectives**, Tara Davis, who is an Assistant Professor of Math, describes how she used inquiry-based learning in her math classes, documenting her successes, and her failures, as well as those of her students. She also suggests ways K-12 educators can embrace this teaching model and offers tips and resources for beginners.

Our regular column, **Webstuff** features a few websites and apps that can be useful in planning and maintaining your schedule. Given students are still on their summer break, in **Field Trips** we won't be offering suggestions. Rather, we discuss how to plan a successful field trip.

There are certainly a lot of preparations that lay ahead for the next school year. Our aim is to help in this planning edition of TEACH. Be sure to check out our website ***teachmag.com*** for more great resources.

Lisa Tran, Associate Editor
@teachmag

HOW TO MANAGE A DIGITAL CLASSROOM

by Anita Townsend

In a traditional model of teaching, the teacher is the source of knowledge. Learning is based on one-dimensional materials that are directly connected to curriculum content and skills. Today's resources however, are digital, interactive, and visually rich; a stark contrast to rather lengthy text description of topics and themes. Students are now at the centre of their learning and use today's technology and resources in ways very different from traditional learning materials. They access multiple sources, customize material to suit their needs, mix various media to create new learning, and then share it with unlimited peers through their social networking sites.

As we transition from traditional teaching and learning approaches to digital and interactive ones, we need to carefully plan and prepare the learning environment. As good teachers have done for decades, good planning provides learning environments that enable students to successfully optimize their potential for success. Having a management plan is essential when using digital learning tools. This plan should cover components such as, classroom organization, instructional strategies, technology availability, and time. The following are some suggestions on planning your digital classroom.

CLASSROOM ORGANIZATION AND MANAGEMENT

- All of your students do not need access to devices all the time. Plan and be specific about what you want the students to use the technology for. What learning goals does the technology support? What is the best technology for specific learning tasks?
- When you have a limited number of computers or hand-held devices available for group activities and students have to share, consider assigning specific roles to group members. If everyone has a specific job to do it is much easier for students to focus on the learning goal.
- Arrange classroom seating so that it is easy for you to move around the room and get to students quickly.
- Actively monitor student use of the technology. Walk around the classroom; be aware of which websites students are accessing and how they are working together.
- Provide students with clear guidelines on school policies and procedures in working with technology in the classroom. Every school should have an Acceptable User Policy on what constitutes proper behaviour when using technology. It is important to establish norms for student behaviour, in your classroom within the context of the project. Have students participate in the development of the acceptable use and etiquette guidelines in your class.
- Establish at the beginning of the unit how and where you want students to organize their data related to the project such as naming files, storing, and sharing files.
- Establish a backup plan for those days when the technology or the Internet connection is not available.
- Ensure the websites and learning platforms you recommend to students are secure. Review which web sites your students are recommending to each other.
- Provide students with a rubric or organizer which clearly defines project expectations and also provides direct communication with parents about the project
- Post anchor charts that provide technology tips or software instructions or put them in a binder near the computers. An evolving list of tips can be generated by the students as they work through the unit.

INSTRUCTIONAL APPROACHES

- Review the learning material provided from manuals or teacher's guides, and map the curriculum to several disciplines, including as many expectations as possible to cover and evaluate in the teaching of the unit.
- The content and the lesson plans are a comprehensive resource, which should enable you to cover a selection of expectations from two or more curriculum areas.
- Use the material to design and implement student learning that extends the curriculum content where and when possible.
- Students are motivated and benefit from working collaboratively with their peers in a team or pairs. This type of learning requires new skills in cooperative work. Students need to learn how to get along, share and learn from each other. Forming teams needs planning. It may be necessary for teachers to consider computer skills and the specific assignment when pairing students.
- Digital learning materials are most effective when integrated into the typical instructional day as opposed to being used just during scheduled lab times.
- As with any other educational resource, the use of the material should be mediated by teachers. Teachers' responsibilities are not relinquished; instead, the teacher

becomes a coach and mentor, using the majority of teaching time to provide instruction rather than large group lessons.
- Make connections with the content in the online unit to information from other websites that are relevant and timely.
- Provide specific and descriptive feedback to students as they progress through the online material, just as you would with traditional material. Integrate assessment tasks, which provide for formative and summative assessments of the tasks in the unit.
- Using interactive online materials will enable learning to become much more student centred. Leave room in your planning for student inquiry and creativity.
- Facilitate and encourage students' use of primary resources by using online polling, interviews, and accessing photo galleries.
- Take full advantage of student expertise. Students often know more than teachers do about a technology, and teaching someone else what they know is a great way to reinforce their own learning and foster a supportive classroom community.
- Even though students will do much of their work independently or in groups, they will still need to learn the skills necessary to follow schedules and maintain deadlines.
- Provide opportunities for students to connect with other students and to connect with experts around the world and then collaborate.

Just as students today share their expertise and knowledge readily with each other online, it is beneficial for teachers to form online support groups as well as the traditional face-to-face connections. Expanding your learning about technology integration can be done anytime, anywhere, by joining an online educator community. Gone are the days when the only place to learn new teaching approaches was a workshop presented to a room full of people.

Different sources of technology will provide different types of access and various levels of uniformity, good teachers never relied on one teaching resource or one teaching method, likewise today's teachers will never use a single technology in a single way.

Anita Townsend is an Education Consultant for the University of Toronto and former Principal at Simcoe County District School Board.

The Shadowed Road

version 2.0

An improved multimedia experience for mobile devices.

Try it FREE today!

THESHADOWEDROAD.COM

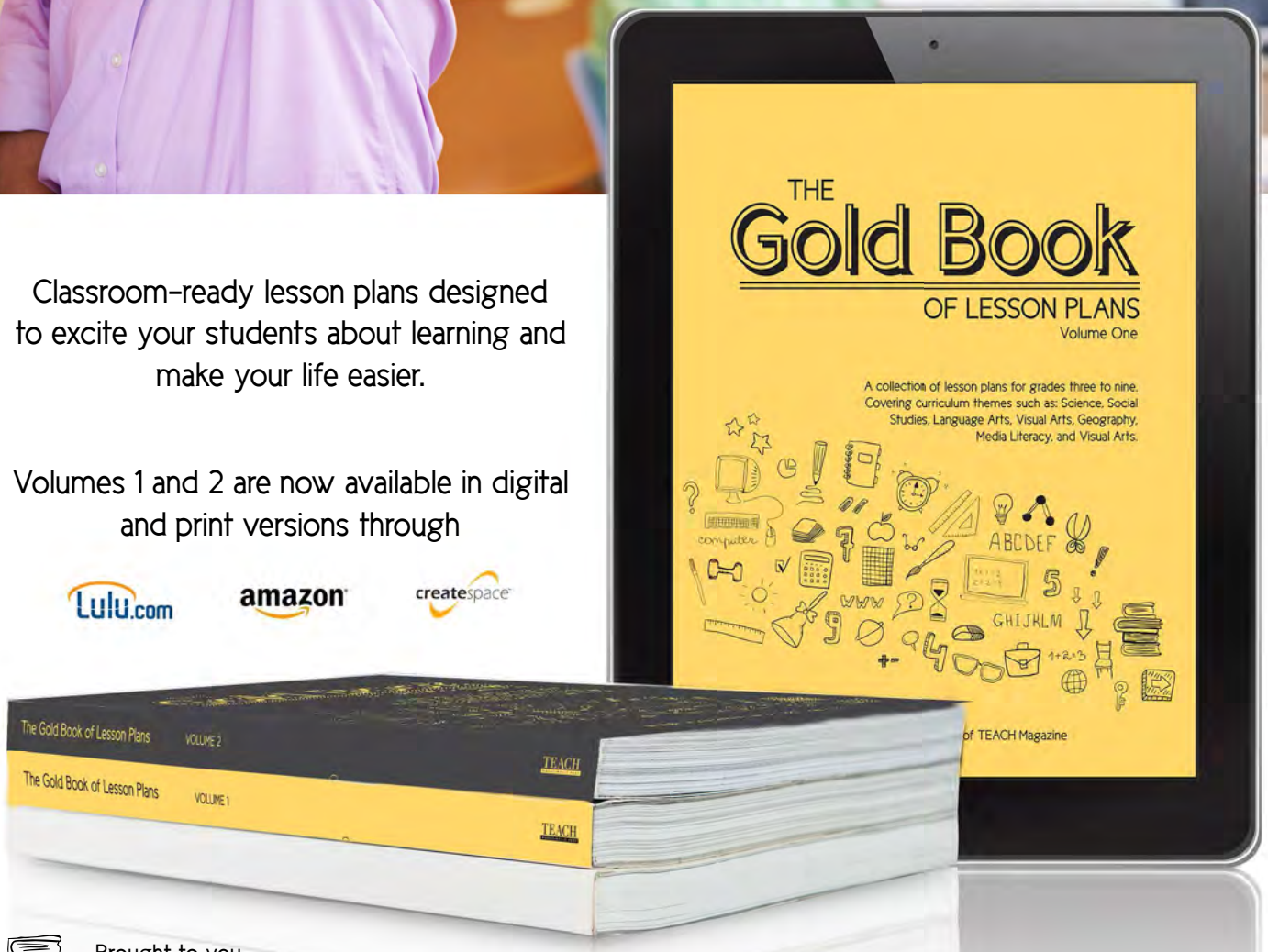
Brought to you by TEACH Magazine

The Remedy for Monotony

Classroom-ready lesson plans designed to excite your students about learning and make your life easier.

Volumes 1 and 2 are now available in digital and print versions through

Lulu.com amazon createspace



Brought to you by the editors of TEACH Magazine

For more information visit TEACHMAG.COM/EBOOKSTORE

USING INQUIRY-BASED LEARNING TO TEACH MATH

by Tara Davis

My Inquiry-Based Learning (IBL) journey started in 2012 at a workshop hosted by the Mathematics Association of America. I received training in teaching IBL, specifically in a Problem Solving for Math Teaching class setting. I was skeptical about IBL, having made it through a Ph.D. program being taught almost exclusively with the traditional lecture method. But after graduate school, when I began teaching university full time in 2011, my colleagues challenged me to make my lessons more active. These encouragements as well as my own budding curiosity were what led me to participate in the workshop.

At the workshop, I learned that IBL has a broad definition and varied implementation. It is generally characterized by a student-centered learning experience, with the instructor serving more as a facilitator or a coach. There is little to no lecturing. IBL instruction does not use a traditional textbook, and may forbid students from consulting outside sources such as books or the Internet. Students engage in a sparse but logically ordered and sufficiently scaffolded sequence of problems that are rich and support inquiry to the heart of big mathematical ideas. The problems may be worked on alone or in groups, at home, or during class time. The solutions are discussed in class, with the students leading both the presentations and the questioning.

In 2013, I implemented IBL instruction in my Problem Solving class. I did some things right the first time: I allowed students to work together, I removed the shame from making a mistake, and I acknowledged the need for differentiation in instruction. Specifically, I started the semester by explaining that I love mistakes. I backed up this assertion with a focus on process; even after a correct solution was presented, I solicited additional explanations. I called on individuals or groups who I knew had not gotten as far as others or even who had incorrect answers to describe their thinking and to stimulate whole class discussion. I selected problems that allow various approaches and that have a high ceiling. When students wrote up their homework solutions, they were required to include a reflection on the problem solving process. The students were given generous amounts of time to solve problems, and were required to work in diverse groups varied throughout the semester.

I made some mistakes as well: I did not explain the purpose of IBL, I failed to hold all students accountable for sharing their ideas, and I did not provide clear grading criteria. Despite my growing pains, I noticed that my students were taking ownership in their learning and inventing mathematics for themselves. This observation was substantiated by positive results of student surveys, self-assessments, and reflective writing.

The following year I taught IBL Problem Solving again and I was able to work out many of the kinks. Most days in class were spent either in small groups of 2-3 students investigating problems, with individuals presenting solutions to homework questions, in gallery walks, or discussing multiple solutions to a given problem. K-12 schools do not offer entire classes in Problem Solving, but there are various opportunities to weave such materials into the curriculum: developing number sense in an Algebra or Calculus course; posing problems related to Discrete Mathematics or Statistics; investigating notions of addition and multiplication of integers or rational numbers.

I felt that there was no going back to traditional teaching methods in the Problem Solving Course. But transitioning to IBL instruction is a process that requires time and reflection. Teachers must focus on their goals, be patient, make mistakes and learn from them, and take opportunities when they arise. Since starting my IBL journey I have taught a graduate education course in Math Curriculum and Instruction with IBL. The students led the discussions of the textbook chapters, presented their solutions to mathematics problem sets, and helped each other with writing their lesson plans. I also implemented IBL in Abstract Algebra. I had endured frustrations when teaching the class traditionally to students who showed little interest in the materials. The IBL class was taught in a Moore method style, modified

with some small group investigations. Throughout the semester the students were struggling to make sense of the mathematical ideas; they were engaged with the problems. The students seemed to love the teaching method, which was confirmed in my end of semester evaluations. I was tentative about using IBL at first, but once I committed it was great, and I plan to use it in two new classes next semester.

Although math is a challenging subject we must keep in mind the NCTM Equity principle: *Excellence in mathematics education requires equity—high expectations and strong support for all students.* Doing so will make using IBL feel less scary or experimental. Students can do more than memorize, mimic, perform algorithms and apply computational skills, if we ask them to. Many of the ideas and methods of IBL have applications to K-12 educators and students. Your journey could start with something as simple as giving your class the next problem that you were going to demonstrate in your lesson plan, but rather than showing them how to work it out, ask them to think about it in small groups. Spending time working on math investigations and discussing student thinking could be implemented in almost any class. I would encourage interested instructors to commit to using IBL for a full semester in just one course.

My hope is that my story can help others. My main message is: go for it. If you have ever questioned whether to use IBL, do not hesitate. Seek out opportunities and utilize the resources that are available, including conference support, websites and blogs, published class notes, and discussions with local colleagues. This pedagogy is fully supported by evidence and the knowledge base continues to grow, but that doesn't mean that implementing it for the first time will be easy. Rest assured that the rewards for both instructor and student are worth the risks.

HELPFUL RESOURCES FOR K-12 EDUCATORS INTERESTED IN IBL

Discovering the Art of Mathematics

www.artofmathematics.org

This team has, in addition to a helpful blog, created several books with independent chapters on diverse topics that could be adapted easily to many high school curricula, including Geometry and Discrete Math.

Math in the City

http://mitcccny.org

This website hosts professional development workshops related to IBL instruction.

The IBL Blog

www.theiblblog.blogspot.com

The IBL Blog contains nuts and bolts tips on implementation and promotes the use of IBL in middle and secondary classes.

The Academy of IBL

www.inquirybasedlearning.org

This is a community that supports IBL practitioners, both aspiring and experienced.

IBL Calculus

www.iblcalculus.com

This website contains in-class activities and notes to the instructor.

Jo Boaler's books, online courses, and website

www.youcubed.org

Jo Boaler's resources contain many problems, methods, and materials.

The Journal of Inquiry Based Learning

www.jiblm.org

This website contains peer reviewed course notes for Moore Method style instruction.

The Teaching Abstract Algebra for Understanding

www.web.pdx.edu/~slarsen/TAAFU/home.php

This website contains some activities that would be appropriate for usage in high school algebra classes.

Books

The books "Thinking Mathematically" and "The Heart of Mathematics: An Invitation to Effective Thinking" contain many problems that would be appropriate for high school math students.

"The Young Mathematicians at Work" series of books and videos have problems that can be applied in diverse settings as well as discussions about teaching and learning.

Tara Davis is an Assistant Professor of Mathematics at Hawaii Pacific University. She studied geometric group theory at Vanderbilt University, but her interests now include mathematics education, especially active teaching and inquiry-based learning.

How to Plan for a Successful Field Trip

It's mid-summer and your students are still off on their break a few more weeks. So now is the opportune time to start planning for field trips. But instead of suggesting field trip opportunities, in this issue we will discuss how to plan for a successful one.

Choosing the right field trip

Before you book the field trip, consider how it will support your curriculum. You and your students may be visiting a fun destination, but education should still be the priority. Review the learning outcomes for your jurisdiction and determine which will be met by the excursion.

Booking

Once you decide on a field trip location, book early to avoid program spots filling up. The Vancouver Aquarium along with the Lower Mainland Museum Educators offer a few suggestions such as, having all necessary information ready to reserve your field trip: the total number of students, the programs you're interested in, your preferred dates and times, as well as any special learning needs your students may have. Other tips include inquiring about the number of parent chaperones allowed, the total cost, itinerary, as well as the cancellation policy.

Preparing students

It's easy for students, especially young ones, to become excited at the thought of a field trip and lose sight of the purpose. ***LearnNC.org*** suggests introducing students to a field trip as part of the lesson so that they understand that the trip is to meant to supplement their learning, and is not a free-for-all day.

Students will be learning outside of the traditional classroom setting so some may have trouble absorbing information. You can help prepare students by explaining the day's itinerary and activities beforehand so they know what to expect.

If applicable, introduce students to any new vocabulary they may encounter on their field trip. You may also prepare older students with a simple assignment that they must complete during the day. For example, if students are attending a play, they may have to answer quick questions about characters, plots, themes, and costumes.

As for behavioural expectations, outline what you deem as acceptable and unacceptable. Provide examples such as, students must ask to use the washroom and not run off at the sight of one. It may be helpful to remind students that they will be ambassadors for the school and must be on their best behaviour.

Checklists

To ensure the smoothest field trip, a checklist is handy so that no one forgets anything, including the teacher! Create a simple checklist for students so that they remember to bring items such as:

- notebooks or note taking devices
- cameras
- appropriate clothing and comfortable shoes
- their lunches (or money to purchase one)
- medications for those with pre-existing conditions

For teachers, the same checklist applies, as well as:

- directions to the location
- payment for the field trip, if applicable
- attendance list
- cell phone for calling the school, if necessary
- emergency contact numbers for students
- extra money in case of emergencies

When the big day arrives, the students will be brimming with excitement, and there certainly will be a lot to keep track of. But remember that this is a unique day of learning so don't forget the most important thing—**have fun!**

CURRICULA

FOR GRADES
9 TO 10

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.theruptured sky.com***.

ABORIGINAL PEOPLES IN THE WAR OF 1812 AND THE FIRST AND SECOND WORLD WARS LESSON ONE

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.

CURRICULUM LINKS

Canadian History, Civics, English

Overview

In this lesson package, students are asked to examine and compare the participation and contributions of Aboriginal peoples in the War of 1812 and the First and Second World Wars. They will begin by reading the graphic novel *The Ruptured Sky* in order to gather information on the various Aboriginal leaders and Nations that participated in the War of 1812, following which they will conduct research into the participation and contributions of Aboriginal peoples in the First and Second World Wars.

Students will also describe the relationships that Aboriginal peoples had with other Canadians before, during and after each of these wars as well as the reasons that Aboriginal people had for participating in Canada's war efforts. Students will employ research and inquiry processes in exploring the larger concepts of bias and historical significance in order to understand why the stories of Aboriginal peoples' participation in Canada's war efforts have been marginalized and why we need to revisit history in order to include and acknowledge the significance of their stories.

Key Concepts

Students will explore the following concepts:
- Historical significance
- Bias

Learning Skills

- Inquiry Research Skills
- Recording key ideas and information from a range of resources

Time Required

Allotted classroom periods consisting of 40-60 minute sessions (plus time allotted for homework), over a three to four week period, based on local program schedules and student needs.

Lesson Steps

Step 1 Introducing the graphic novel *The Ruptured Sky*
Step 2 Inquiry and Research – Aboriginal Leaders in the War of 1812
Step 3 Aboriginal Groups and Nations in the War of 1812
Step 4 3-Panel Displays
Step 5 Aboriginal Participation in World War I
Step 6 Aboriginal Participation in World War II
Step 7 Performance Task: 3-Panel Display

Blackline Masters

#1 *The Ruptured Sky*
#2 Summarizing Information — Making Notes Assessment Rubric
#3 Research Steps Checklist
#4 Writing Rubric
#5 Reflection Journals Rubric
#6 3-Panel Display Rubric
#7 3-Panel Display Checklist

Materials Required

For Teachers
- See Recommended Resources document

For Students
- Copy of *The Ruptured Sky*
- Student handouts (included)
- Internet access
- Materials for 3-panel displays (paper, glue, scissors, staples, s-panel display boards, etc.)
- Recommended resources
- Library access

CURRICULUM EXPECTATIONS

Overall Curriculum Expectations

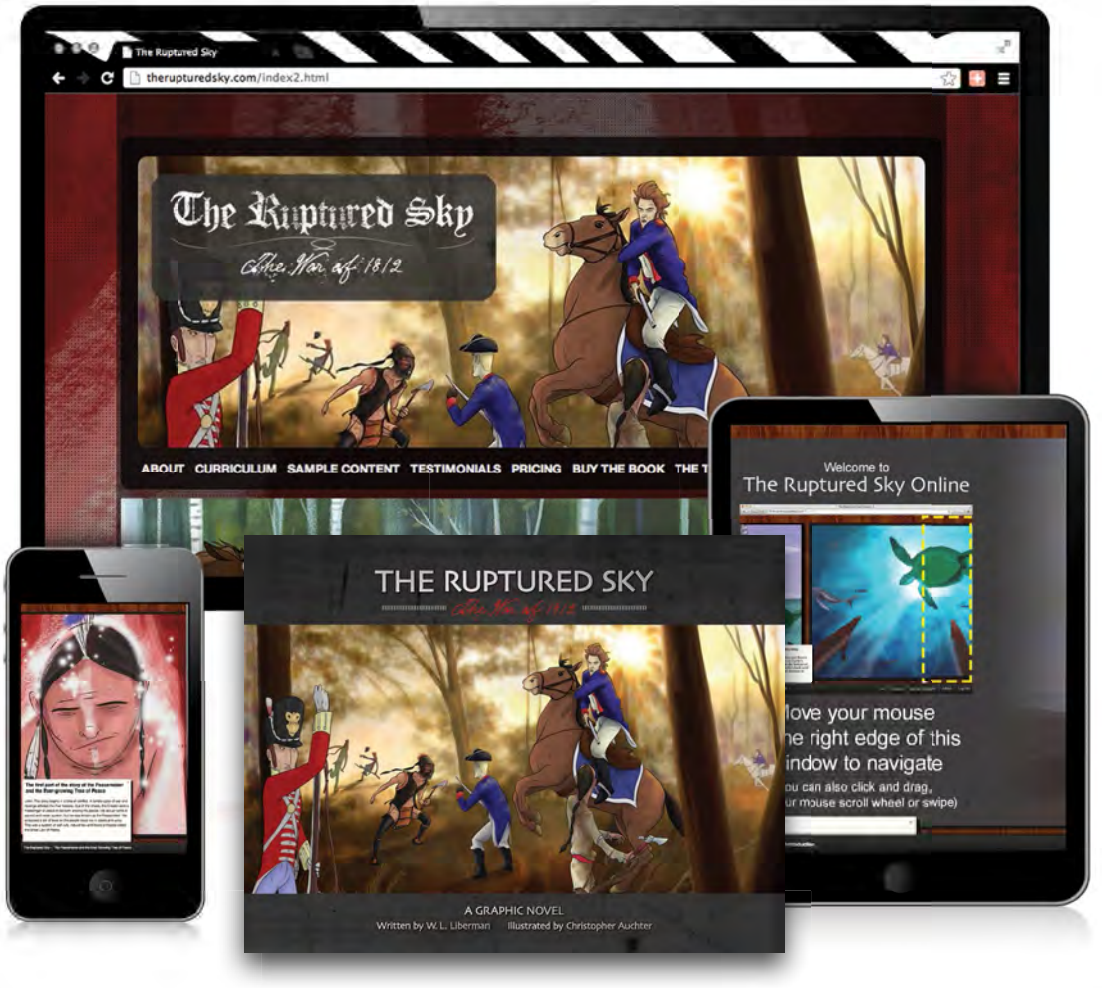
The overall expectations listed below serve as an entry point for teachers. Teachers are encouraged to make connections to specific expectations in their region and grade.

Language Arts

Listening and Speaking

- Listen to others in group discussions and to audio resources to understand and respond appropriately
- Communicate orally in a clear coherent manner for different purposes using language suitable for the intended audience

THE RUPTURED SKY IS OFFICIALLY APPROVED!*



The Ruptured Sky is a digital literacy title that explores the War of 1812 from First Nations perspectives. A great resource for teaching social studies, history, literacy, and First Nations curriculum.

SEE MORE INFO AT THERUPTUREDSKY.COM

Ontario
Ontario Media Development Corporation
Société de développement de l'industrie des médias de l'Ontario

PEARSON

TEACH
MAGAZINE • LE PROF

* Officially approved resource for the Manitoba Ministry of Education, York Region District School Board and the Toronto District School Board.

Reading
- Read and demonstrate an understanding of a variety of informational and graphic texts from different historical periods by identifying the important ideas and supporting details
- Identify the perspectives and/or biases evident

Writing
- Generate, gather, and organize ideas and information to write for an intended purpose and audience
- Draft and revise writing based on self, peer, and teacher feedback
- Revise drafts to improve content, organization, clarity, and style of their written work
- Use language and conventions accurately and effectively
- Use several different presentation features to enhance clarity and communication in their work (fonts, computer graphics, design features, and elements, etc.).

Media Studies
- Create a variety of media texts for different purposes and audiences using appropriate forms, conventions and techniques
- Identify the perspectives and bias in media texts
- Describe the topic, purpose, and audience for media texts and explain how various features of this format communicate the intended key ideas and information

Canadian History

Grade 10
- Assess the influence of Great Britain and Europe on Canada's participation in war and peacekeeping
- Describe the contributions of Canadians during World War I
- Evaluate the impact of social and demographic change on Aboriginal communities (e.g., relocation, urbanization, education, pressures, etc.)
- Assess how individual Canadians have contributed to the development of Canada and the country's emerging sense of identity
- Describe the achievements of Aboriginal organizations (e.g., National Aboriginal Veterans Association, in gaining recognition of the rights of Aboriginal peoples in Canada)
- Interpret and analyze information gathered through research, employing concepts, and approaches appropriate to historical inquiry
- Communicate the results of historical inquiries, using appropriate terms and concepts, and a variety of forms of communication

Research

- Formulate different types of questions when researching historical topics, issues, and events
- Gather information on Canadian history and current events from a variety of sources (e.g., textbooks and reference books, newspapers, the Internet) found in various locations (e.g., school and public libraries, resource centres, museums, historic sites, community and government resources, etc.)
- Distinguish between primary and secondary sources of information (e.g., primary: artifacts, diaries, documents; secondary: books, articles) and use both in historical research
- Evaluate the credibility of sources and information (e.g., by considering the authority, impartiality, and expertise of the source and checking the information for accuracy, underlying assumptions, stereotypes, prejudice, and bias)
- Organize and record information gathered through research (e.g., using notes, lists, concept webs, timelines, charts, maps, graphs, mind maps, etc.)
- Formulate and use a thesis statement when researching a historical topic or issue
- Analyze information, employing concepts and theories appropriate to historical inquiry (e.g., chronology, cause and effect, short- and long-term consequences, etc.);
- Distinguish between fact, opinion, and inference in texts and visuals found in primary and secondary sources
- Identify different viewpoints and explicit biases when interpreting information for research or when participating in a discussion
- Draw conclusions and make reasoned generalizations or appropriate predictions on the basis of relevant and sufficient supporting evidence
- Complete research projects that reflect or contain the elements of a historical inquiry process: preparation, research, thesis, supporting

Communication

- Express ideas, arguments, and conclusions, as appropriate for the audience and purpose, using a variety of styles and forms (e.g., reports, essays, debates, role playing, group presentations)
- Use an accepted form of documentation (e.g., footnotes, endnotes, or author-date citations; bibliographies or reference lists) to acknowledge all sources of information, including electronic sources

- Use appropriate terminology to communicate results of inquiries into historical topics and issues

Civics

- Explain how democratic beliefs and values are reflected in citizen actions (e.g., Remembrance Day services, National Aboriginal Day, etc.)
- Articulate and clarify their personal beliefs and values concerning democratic citizenship (e.g., voting age, (compulsory) military service)

STEP ONE:
Introducing the graphic novel, *The Ruptured Sky*

Background Information

Born March 9th, 1891, Francis Pegahmagabow, an Ojibwe, and a member of Canada's Native Hall of Fame was the most highly decorated Native soldier that fought for Canada in the First World War. He was awarded the Military Medal (MM) plus two bars for bravery in France and Belgium. Francis was a sniper specialist in the First World War and served for nearly the entire war until he was wounded and returned to Canada. He became Chief of the Parry Island Band in Ontario and later served as a Councilor for the band as well. Francis Pegahmagabow was a quiet, peaceful man who didn't talk about his wartime experiences. He had served with courage and humility. He died on the Parry Island Reserve on August 5th, 1952.

Materials Required

For Teachers:
- *The Ruptured Sky* (BLM #1)
- Summarizing Information — Making Notes Rubric (BLM #2)
- Collection of images as described in lesson

For Students:
- Chart paper and markers
- Copies of *The Ruptured Sky*
- Access to the internet and/or one or more libraries
- Recommended print resources
- Images as described in lesson of Francis Pegahmagabow
- Search results for Francis Pegahmagabow:
  www.google.ca
- One or more images of Tecumseh:
  www.google.ca

Teaching/Learning Strategies

Show students a collection of images that include one or more pictures of Francis Pegahmagabow and the medals he was awarded in the First World War.

Ask students: *Who is this person? What medals are these?*

Provide students with the names and descriptions of the medals first. Then provide them with the name of Francis Pegahmagabow if no one has already come up with it.

Ask students how many had heard this name before today? Then provide students with a brief bio of Francis Pegahmagabow and ask:

Why is it that so few students recognize/know anything about someone who was the most decorated Native soldier in the First World War?

Have students share ideas orally. Record responses on chart paper.

Ask students to record individually what else they know about the participation of Aboriginal peoples in the First and Second World Wars and submit to the teacher for Assessment for Learning. Explain the purpose of doing this.

Optional: Have students share ideas orally. The teacher may wish to record collective responses on chart paper. (Or ask students to record what they know individually and then have them meet in groups of five, share responses orally and record on chart paper. Groups can then report to the large group.)

Explain to students that Aboriginal peoples have played very important roles throughout history in European military conflicts.

Revisit the question: Why is it we know less about them than other participants? Have students share ideas orally to add to the ideas already generated.

In what conflicts have Aboriginal peoples played a role? (French & Indian Wars, Revolutionary War, War of 1812, First World War, the Boer War, Second World War, the Korean War.)

Point out to students that the 200th anniversary of the War of 1812 is being/was celebrated in 2012.

The teacher might quote Tecumseh and/or write the quote on the chalk/white board.

"We are determined to defend our land, and if it be His will, to leave our bones upon them."

Ask students if they know whose words these are, when they were made and what they mean. Share ideas orally.

Show students an image of Tecumseh

Tecumseh, a Shawnee Chief, is remembered as a powerful warrior and persuasive orator. His vision of a united confederacy of Aboriginal peoples across North America living in peace and freedom caused him to ally himself with the British.

What was the War of 1812 about? (At this point students may not recall/know a great deal but it could be useful for the teacher to get a sense of the starting points for learning by the class as a whole, i.e., Assessment for Learning)

Why would those who fought have been prepared to fight to the death? Record student responses to above on chart paper for future reference.

Ask students to share ideas orally in response to the above questions.

Introduce the graphic novel, *The Ruptured Sky*. Explain to students that they will be asked to read *The Ruptured Sky*, a graphic novel about the War of 1812, in order to gain an understanding of the role played by Aboriginal nations and leaders in the War of 1812 and to identify and describe the participation of various Aboriginal groups and nations as well as their leaders. Following this, they will then gather additional information about the participation of Aboriginal peoples in both World Wars and compare their participation and contributions in the First and Second World Wars to those in the War of 1812. To illustrate their findings they will be asked to create a 3-Panel display or to create a website that creates public awareness about the participation and contributions of Aboriginal peoples in these three wars.

Invite students to read the novel thinking about the following questions:

- What was the War of 1812 about?
- For what reasons would Aboriginal peoples participate in the war?
- What Aboriginal leader(s) played prominent roles in the War of 1812? Describe their roles and contributions.
- In what ways did these leaders inspire their people?
- What is their legacy today?

Provide students with copies of *The Ruptured Sky* (BLM #1).

Assign the reading of *The Ruptured Sky* as homework or provide class time if available.

Collect notes students have made in response to the questions after they have read the novel and assess for individual student starting points for learning. Refer to Summarizing Information — Making Notes Rubric (BLM #2).

Return these notes to students before beginning Step Two.

Literacy Extension

Have students write in their Reflection Journals recording their thoughts and feeling about what Canada and its allies are defending when they go to war.

STEP TWO: Inquiry and Research—Aboriginal Leaders in the War of 1812

Materials Required

For Teachers:
- Chart paper and markers

For Students:
- Notes from Step One
- Paper for mind maps
- Chart paper and markers
- Research Steps Checklist (BLM #3)
- Starting points for Internet searches (included)
- Johnson, Robin. *Famous People of the War of 1812*, Blue Earth Books – Capstone Press: Mankato, Minnesota. 2003.
- Koestler-Grack, Rachel A. *Tecumseh 1768-1813*, Blue Earth Books – Capstone Press: Mankato, Minnesota. 2003.

Teaching/Learning Strategies

Part A
Have students meet in groups to share their responses to the questions in Step One. Students may add to their own notes as they wish.

Ask students to record two or more questions they still have.

Groups then report to the large group and students can discuss their findings and share their additional questions.

Part B
Review research steps with students using Research Steps Checklist (BLM #3).

- Identify the topic and focus of research
- Create questions to focus research
- Identify and prioritize starting points for research
- Review resources and record notes that include main ideas and supporting details
- Organize notes to report on findings
- Create a report on research findings
- Include a bibliography of resources from which information and ideas are drawn

Ask students to create a mind map of research sources that might provide relevant information. Googling "mind map images" provides a wide range of mind maps as models if needed. (Assign as homework or class time.)

Have students trade mind maps and provide feedback to each other.

You may wish to have students do these exchanges two or three times before collating ideas in a large group. Have students add to their mind maps adding new ideas as they arise. The teacher may do this as a whole class exercise if preferred especially if students are already familiar with research sources or skip this step altogether.

Ask students to identify five starting points for their research (e.g., libraries, archives, websites, historical plaques at historical sites, recommended resources, etc.).

Assign students to do further research on the personalities identified in Step Two (homework or class time).

Provide students with suggested resources and Some Suggested Starting Points for Research list.

Have students introduce one of the leaders they have researched in small groups of five. Two to three minutes each.

STEP THREE: Aboriginal Groups and Nations in the War of 1812

Materials Required

For Teachers
- Writing Rubric (BLM #4)
- Reflection Journals Rubric (BLM #5)

For Students
- Copies of *The Ruptured Sky*
- Mind Maps — Sources of Resources
- Internet access
- *Documenting the War of 1812 Series*. Crabtree: St Catherine's, Ontario. 2012.
  Clarke, Gordon. "Major Battles of the War of 1812."
  Fatt, Lizann. "The Legacy of the War of 1812."
  Isaacs, Sally Senzell. "What Caused the War of 1812?"

Teaching/Learning Strategies

Part A
Ask students to recall orally what groups/Nations of Aboriginal peoples participated in the War of 1812. Then ask students to reread the novel and to make notes in order to gather information on the participation of various Aboriginal groups and nations in the War of 1812. Include both Nations who participated in specific battles and Nation alliances.

Note to Teacher: Creating a Website (Alternate Performance Task)

Have students work in groups and assign one of the above to each group e.g., Mohawks, Mississauga, Ojibwe and Métis rather than have students research all groups. Group work can be used to create web pages for a website.

Part B
Have students review their mind maps of resource sources and choose two or three to investigate in order to gather additional information and/or images about the participation of Aboriginal peoples in the War of 1812. Students should conduct research on the groups described in the graphic novel as well as two other battles in which Aboriginal and/or Métis peoples played a role, that are not described in the novel (e.g. Battle of Chateauguay, Crysler's Farm, etc.)

Battle of Chateauguay:
www.eighteentwelve.ca/?q=eng/Topic/49

Crysler's Farm: ***www.cryslersfarm.com/battle.htm***

Remind students to collect both images and information.

Ask students to create one page reports on the participation of various groups. (Similar to the text that they might find on an historical plaque to be used as part of their 3-panel display board or website.) If necessary, show students several samples of historical plaques.
These reports will be used in their 3-panel displays. Ask students to submit their reports for assessment. Refer to Writing Rubric (BLM #4).

Part C
If time is available show the class the PBS video: "War of 1812 PBS," 2011.

Available online: ***www.youtube.com/watch?v=M-bC2TWTGyQ*** (90 minutes). If all students have access to the Internet this could also be assigned as homework. Students should record additional notes while viewing.

Literacy Extension

1. Have students do additional research on the participation of Métis peoples who were involved in the War of 1812: ***www.metismuseum.ca***
2. Have students read the graphic novel *The Battle of Queenston Heights* by David Boyd and Drew Ng, Harcourt: 2007.
3. Have students conduct research to find out more about Tecumseh Day in October of each year. Create a bookmark to commemorate Tecumseh Day.
4. Have students conduct research to find out how the local communities of each leader identified in their earlier research have marked their contributions in a significant way.

To see the full lesson plan or to learn more, please visit ***www.therupturedsky.com***.

School Specialty®
Canada's PREMIER™ Education Resource

Education is Your Specialty, Making it Easier is Ours.

EXPANDED OFFERING! School Specialty® is now

YOUR OFFICE SUPPLIES HEADQUARTERS!

SPECIAL INTRODUCTORY OFFER!

15% OFF*

OFFER VALID UNTIL AUGUST 30, 2015

PROMOTIONAL CODE: 020_OFFICE_15

School Specialty, the One Stop Shop for Educators

Sax Arts Education · School Smart · Childcraft · Abilitations · Spark · Sportime · Premier · Frey Scientific · Classroom Select · Royal Seating · Califone

ORDER TODAY!

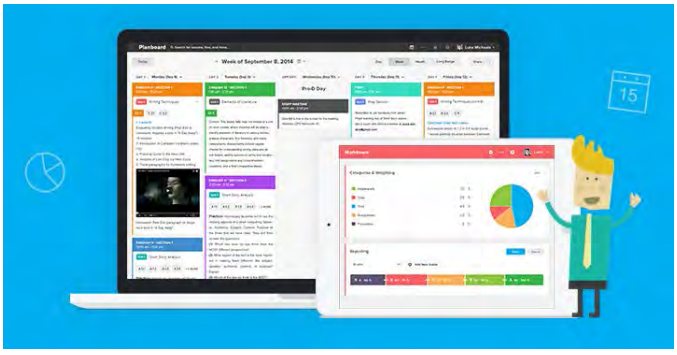
VISIT www.schoolspecialty.ca/office

P 1.866.519.2816 | **F** 1.800.775.0353 | **E** info@schoolspecialty.ca

*Purchase over $99 and receive 15% off. Offer based on list prices. Cutting-Edge innovative products. Local professional service. Use our powerful online search function to quickly search for products by price, brand, category, and grade level. Does not apply to sale catalogues, Premier or intervention orders. Cannot be used in conjunction with any other discount, offer, bid, contract or special promotion.

Planning & Organizing

The trusted paper and pen are no longer the only options for staying organized. For the tech-savvy teacher, planning lessons or keeping track of notes digitally may be the preferred option. Here are some suggested websites and apps that will help with scheduling so that you can focus on teaching.



Planboard
www.chalk.com

Planboard by ***Chalk.com*** is a Canadian website and app that helps teachers organize their schedules. Users can easily create visual and modular lesson plans that accommodate different systems of timetables and semesters. Other options include clicking and dropping items to a class and viewing daily or weekly synopses. As well, teachers can search and check off specific expectations for the province of Ontario, the Common Core, and TEKS (Texas Essential Knowledge and Skills) and keep track of what part of the curriculum they are teaching. Planboard is free for individual usage, with the option for a school to purchase a licence so that all of its teachers can share and collaborate.

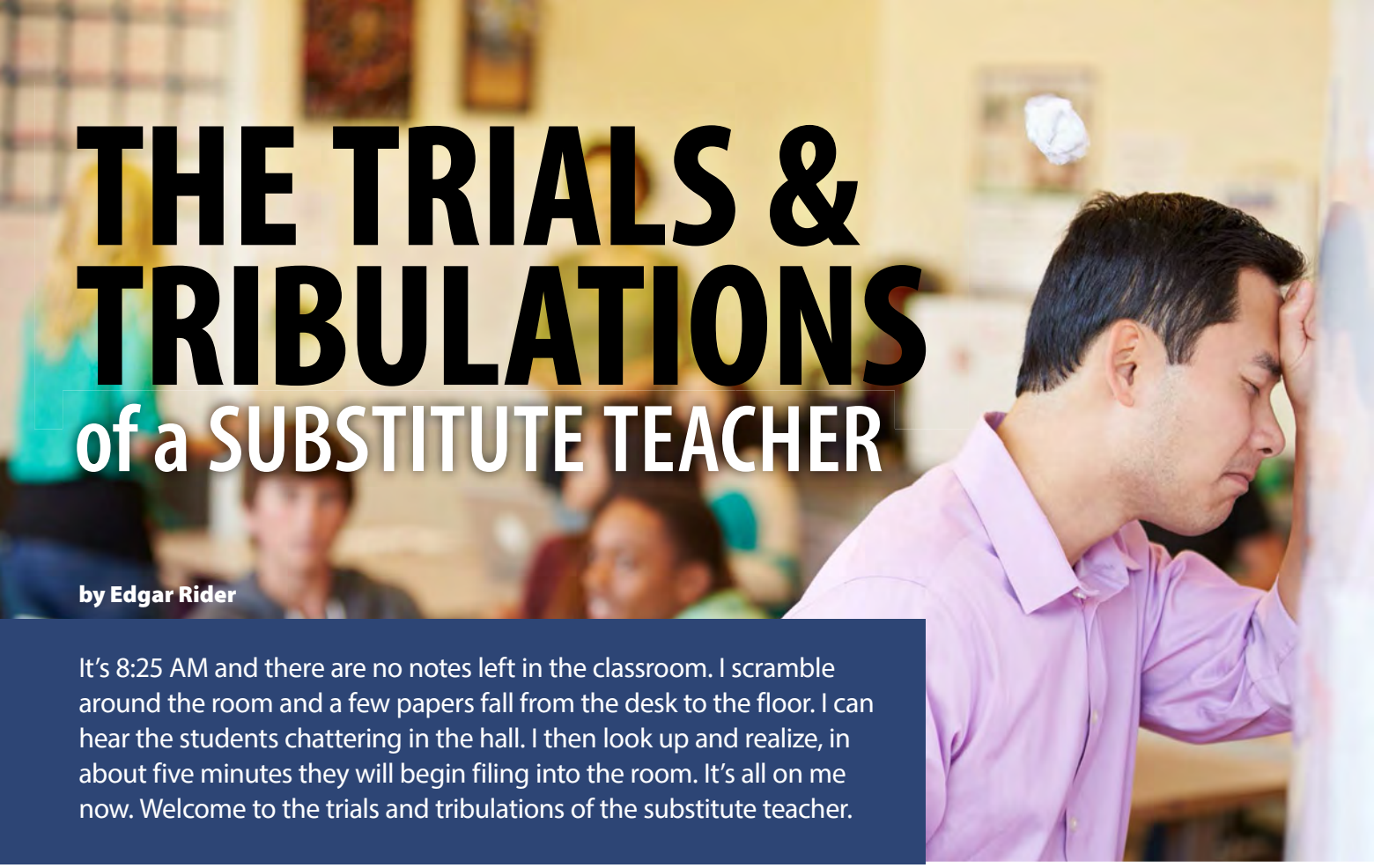
TeacherKit
www.teacherkit.net

TeacherKit is a user-friendly app that helps teachers with their routine class administration. The app is very visual and begins with displaying your classes as actual classroom doors. Users can then add students by taking their picture with the camera or using the photo recognition feature

from a photo. Other features include creating a modular seating plan that displays students' names and photos, taking attendance, adding grades, and behavioural notes. TeacherKit allows teachers to view a student's profile that shows their attendance record, grades, notes, etc. in chart and graph formats. Users can also share and export student data for parents and substitute teachers. All of the student data saved is automatically backed up with options to save them to DropBox. The app is available in seven languages and on Android, iOS, and Windows devices and platforms. The app is free to download with options to upgrade for certain features.

Trello
www.trello.com

Trello is a free, adaptable, and visual app that allows users to organize anything and collaborate with team members in real-time. Trello lets you see everything about your project in a single glance. Users can drag and drop cards onto their board according to projects, themes, timeline, etc. On these cards, they can add checklists, deadlines, photos, labels, file attachments, and more. Users can also comment and add feedback on anything on the cards. Handy notifications inform users when team members have edited a card or remind you of deadlines. Trello works on many devices and operating systems, including Android phones and tablets, iPhone and iPad, Kindle Fire, and Windows 8.



THE TRIALS & TRIBULATIONS of a SUBSTITUTE TEACHER

by Edgar Rider

It's 8:25 AM and there are no notes left in the classroom. I scramble around the room and a few papers fall from the desk to the floor. I can hear the students chattering in the hall. I then look up and realize, in about five minutes they will begin filing into the room. It's all on me now. Welcome to the trials and tribulations of the substitute teacher.

Many substitute teachers like me can teach a different grade every single day, from K-12. It can be challenging. Sometimes, the regular teacher leaves lesson plans and notes. Other times, in the case of a sudden illness for example, I'm left with a blank slate. For us teachers, classroom management is more paramount than teaching the curriculum because let's be honest, some students believe when their teacher is away, it's time to play. You are a stranger to them and it can be hard to earn their respect. Some key questions always come to mind: How do you manage a classroom that is out of control? How do you keep the kids on task? Having a plan is essential. Students can smell panic. Fumbling through your papers or sounding uncertain are dead giveaways. After nearly ten years of substitute teaching, here are some anecdotal suggestions I want to share.

"Can I go to the bathroom?"

Knowing the classroom or school rules before you start teaching is very important. Once early on, I did not know the rules for going to the facilities and let five kids go at once. After they returned, a police officer knocked on the classroom door and informed me that the five students had lit the bathroom on fire! I later learned that no more than two students could go at a time. You never know what students are capable of, even second graders, in this case.

Five-Minute Fillers

Some students may think they can get away with anything when there's a substitute. And they will certainly try, especially when there are gaps in between the last minute lesson plans. In this case, try a "five-minute filler." The Education World website has a selection of them. One for example is called, "Detective Spellcheck." What you do is write ten words on the board then tell the students to close their eyes. The words can be related to the students' current studies or random words that are within their vocabulary and reading level. Meanwhile, quickly erase one of the words and rewrite it, only this time, misspelled. Once students open their eyes, they will have to figure out which word is spelled incorrectly. Another five-minute filler great for reading aloud is called "Poison Word." Quickly scan the selected reading for a word that appears frequently in the text. This word then becomes the "poison word." Each time a student reads the "poison word," it's time for them to stop and for the next student to read. Typically a teacher prompts the students, but with this activity, it's up to them. This encourages the students to listen very carefully to the reading material. It's a good idea to have a couple of five-minute fillers ready to go. These are just a couple of examples, but go through the Education World website and you'll find an extensive list of suggestions for different grade levels.

Impromptu book club

Learning is much more than what's indicated in the lesson plans. Impromptu moments can teach students to think on their feet. I often like to look around the classroom and see if there are any books lying around. Pick one up and see if there are any interesting parts. If there's extra time in the day, read that passage to the students, followed by a general open discussion about it.

Double-take

If you are subbing for PE, you might consider taking attendance—twice. Once at the beginning of the class and again at the end. Some students may try to ditch after the initial roll call. In fact, I once had an entire gym class disappear on me halfway through. So I redid the attendance and they were all marked absent. The security personnel always give us a thumbs up.

Student helpers

Sometimes the teacher will leave a list of reliable students. If not, I've found it's not long before it becomes obvious which students are the exemplary ones. Sometimes, they may come up to the substitute and offer some assistance or, you can call upon them to be helpers. Several student helper jobs may include 'line leader', 'paper passers', 'door holder', and 'lunch helpers'. According to The Cornerstone for Teachers website, the reason for these positions is simple, "The primary purpose of classroom jobs is to transfer responsibility to students for keeping the classroom running smoothly, resulting in uninterrupted instruction." Students may accept the helpers' leadership more easily because they are peers and familiar with each other.

These tips will hopefully be a great starting point to help manage a chaotic classroom and prevent the storm before it hits. I speak from experience, and in most situations these tips will help keep you sane. Substitute teaching is surely challenging, but with a good plan in place, it can also be very rewarding.

Edgar Rider has been working as a substitute teacher for grades K-12 for approximately eight years. He believes this column help substitute teachers who struggle with coming up with last minute lesson plans. He has been published in Criterion International Journal and Copperfield Review.


Plant a Billion Trees
Join The Nature Conservancy to plant a billion trees, one tree at a time, in the fight to end climate change at plantabillion.org
The Nature Conservancy
Protecting nature. Preserving life.™