

# TEACH

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## CURRICULA:

CANADA'S CAPITAL TREASURES

Rideau Canal Locks

LES TRÉSORS DE LA  
CAPITALE DU CANADA  
Les écluses du canal rideau

## FEATURES:

Teaching the World

## COLUMNS:

Are We Wasting Our  
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# NOTES

**H**appy New Year to all of our loyal readers!

In this latest issue of TEACH we have an insightful selection of stories to share with you.

Our feature article by educator, Grant Sundal, carefully discusses the often overlooked side of international teaching. The lure of landing a job in a far away land can be strong as recent grads and even veterans are facing bleak prospects here at home, but the experienced teacher offers some words of caution. Professional training, years of experience, good intentions and enthusiasm, while definitely important, are no guarantee for success in the international school setting. Read more and discover Sundal's suggestions for a positive career abroad.

Are we wasting our money on education? Futurist Richard Worzel returns this issue and estimates that as a nation, we are spending something in excess of \$30 billion a year on what he has often described as a failing, antiquated system. Yet education is the largest provincial expenditure aside from health care and debt service. When savings are sought, as they are now, politicians are

going to look at education first. Follow Richard's regular column and see what his solutions are for an achievable and promising education system.

Elsewhere, our Web Stuff column introduces new websites that you will find useful in the classroom and throughout your teaching: The Healthy Aboriginal Network, Terra Cycle, and GoGo News.

Many of the stories in TEACH often focus on classroom technology. We've received an abundance of positive responses indicating that teachers are embracing the newest technology trends and resources. So we want to know, what does digital literacy mean to you? How does being digitally literate impact you as an educator, librarian, administrator, or principal, etc.? The best entries will be published in an upcoming issue of TEACH! For information on submitting your entry, visit [www.teachmag.com](http://www.teachmag.com).

Until next time, we wish you a successful start to the new year and hope to see you again soon.

Lisa Tran, Assistant Editor.

# TEACH LE PROF

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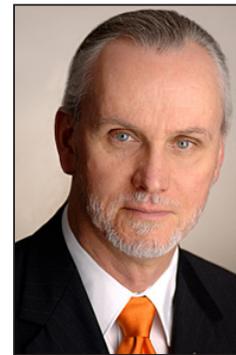
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# FUTURES

Richard Worzel, Futurist



## *Are We Wasting Our Money on Education?*

I recently flipped through a very learned report about the future of education, full of all those important, sententious words that let you know that this is “Deep Thinking” and “Needs To Be Taken Seriously.” It talked about demographics, the structure of the family, the ethnic mix of society, the future of the labour market and the global economy, the structures and governance of the education system, the ways in which technology was changing, and other important topics. It didn’t talk much about actual education and learning, for some reason, or what was happening in the classroom. I’d suggest that the reason this little matter didn’t come up in discussing the future of education is that everyone expects the Same Old, Same Old: kids are going to go to school, be bored to death for 12 years, then leave, either to try to find work with an inadequate high school diploma, or to head for as much post-secondary education as they can’t afford. Teachers are going to teach in the same time-worn, shop-worn fashion as generations of teachers before them. And the subjects will shift a bit, but mostly remain the same. Can’t live without our Readin’, Writin’, ‘n ‘Rithmetic, can we? Back to Basics, right?

I found the fact that an earnest, well-intentioned report on the future of education talked about everything except education very distressing, and

on many different levels. First, the entire operation of the education system seemed to be outside of the scope of a report on the future of education. And even more distressing, there wasn’t even a mention of the goals or purpose of education in our society. Yet, my sense is (and I’ll admit that I don’t know everything that’s going on) that this truly reflects the nature of the discussion, if that’s what it is, on education. So let me act as an anarchist, throw a bomb into the works, and see if I can stir up some debate.

Our education system is a failure, and on many different levels. It is failing our students. It is failing our society. It is failing our economy. It is wasting money we do not have. And it is about to come in, front-and-centre, for cuts that will be made in all the wrong places.

What would we want an ideal education system to accomplish for us? My answer is that each person using the education system would emerge with a better understanding of humanity, the

world, and their own place within it. They would have an appreciation for their own unique talents and abilities, have research and critical thinking skills that they could use for their own edification and their vocation, have a broad enough knowledge of art, history, and science that they could pursue additional areas of interest on their own, and have vocational skills that would enable them to engage in interesting, worthwhile work that allowed them to create a decent life for themselves. It would teach them understanding rather than facts, and engage their curiosity and abilities in support of their own life goals. They would, in short, be of value to themselves, our economy, and the society in which we live.

Our system doesn't do this. It requires kids to endure years of learning facts they largely don't

care about that can be found faster on the Internet than in the classroom, most of which they'll never refer to again. It dumps them out into the world with a high school diploma that they may or may not have truly earned, which is just about worthless for getting a job in today's world. Instead, they have to spend tens of thousands of dollars of their own money in an attempt to get some kind of post-secondary education and/or credentials that might enable them to find work. And yet, somehow we consider this a successful education system.

The world today is very different from the world that I graduated into. Today's students compete in a global economy and because they grew up in a blessed—and expensive—country, the wages they need to gather to make a life here are far



## FUTURES

higher than their peers in developing countries like China, India, Malaysia, Brazil, and so on. And since a global economy implies a global labour force, they are competing directly for jobs with their counterparts in those countries, but at a severe price disadvantage.

But more importantly, as I described in some detail in my last column, automation is eating its way up the workplace food chain and displacing more and more workers from both blue- and white-collar jobs. The end result is that almost all routine work is disappearing from our society, leaving people, old and young, stranded without a way to make a living. We are, as a country, becoming significantly poorer, in part because we are educating for the past, not the future.

And yet, we judge our education system a success. In 2010, Canada was ranked #6 out of 70

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countries in rankings of 15 year-olds, such rankings are created by the OECD (Organization for Economic Cooperation and Development, i.e., the countries formerly known as rich). That's pretty good—if your interest is in doing a poor job educating people, which is nonetheless somewhat better than other countries. It's not so good if you're concerned about providing an education that is actually worth something.

Ask yourself: How many young people do you know who have finished their education that either cannot find work, are working part-time instead of full-time because that's all they can get, or are doing something far below their talents and abilities because they have to make a living? Virtually everyone I know knows people like that. Is that

the hallmark of a successful education system?

It's no good being the world's 6th best at doing

something useless just because everyone else is doing the same. Your mother would have said, "If everyone else jumped off a cliff, would you?" If we don't change, we will kid ourselves that we're succeeding even as we dive over the edge of that cliff.

I have prescriptions for updating the education system, as I'm sure other people do, and about which I've written at length, here and elsewhere. But until we start talking about what kind of education we need for our country and our citizens between now and 2050, there is no point in talking about how to deliver it. Right now there is no such discussion. The dead inertia of the education system carries us forward, and we can't be bothered to question where we're headed.

Meanwhile, I estimate that we, as a nation, are spending something in excess of \$30 billion a year on this failing, antiquated system. When times were flush, that escaped notice, but now the aging of the boomers is about to make our health care costs explode, crowding out expenditures on everything else. And education is the largest provincial expenditure aside from health care and debt service, so when savings are sought, politicians are going to look at education first. And part of the examination is going to be the pensions of retired and retiring boomer teachers, especially in light of the lack of adequate pensions available for private sector workers who are paying taxes to support the pensions of public sector workers. I believe this is grossly unfair; teachers' pensions were negotiated in good faith, have mostly been properly funded—and yet, because teachers are among the highest profile of civil servants, they are going to be front and centre in the battlefield.

This is unfortunate first because it is grossly unfair. But it's even more unfortunate because it's going to deflect attention away from where it should be: what our education system needs to become and how we can get it there. As a result, we will continue to perpetrate the obsolete objectives and techniques we use now to guide the education system, but cut the funding available to do so. We will drop from being #6 in delivering useless education to perhaps #15 or #20. The fact that we've fallen behind in the race among the incompetent will obscure the fact that we shouldn't be in that race at all, but going in a completely different direction.

*Richard Worzel is Canada's leading futurist, and speaks to more than 20,000 people a year. He volunteers his time to speak to high school students for free. Contact him at [futurist@futuresearch.com](mailto:futurist@futuresearch.com).*





# TEACHING THE WORLD

**How cultural intelligence can help you survive and thrive in the international school classroom.**

*By Grant Sundal*

**I**t's doubtless that teaching overseas is looking attractive these days amid a continuing teacher glut in Ontario. The possibility of actually landing a job is appealing enough—particularly for recent teacher college grads facing bleak prospects here at home. And given how these overseas placements are often touted, even experienced veterans might be tempted

to take the leap for a compelling change of circumstance.

Simon Gauci—a veteran overseas teacher himself—extols the many virtues of international schools in “Beyond Borders: An Insider’s View on International Teaching” (TEACH Magazine, Sep 01, 2010). As described by Gauci, not only do these schools enjoy “superior teaching



resources and facilities” with “equal access to information,” but they are also “up on the latest technology, are generally non-profit, have a written curriculum, reside in stimulating cultures, and attract students who, on the whole, are motivated and polite.” Gauci further boasts that in most in-

ternational schools, “salaries are equal to, if not higher than, Canadian standards” before delivering the coup de grace: “Imagine taking home your gross salary—it’s all yours, tax-free.”

Now, before you go tearing off to the next overseas recruiting fair, let me offer a word or two of caution. Yes, there are rewarding and lucrative jobs out there, but overseas teaching is as varied as it is complex. I am not alluding *just* to dealing with the inevitable culture shock. You need to keenly appreciate the challenges involved in actually *teaching* culturally diverse students in what will by definition be a unique instructional and learning culture—an elemental consideration often glossed over when contemplating the more glamorous aspects of working overseas.

As a teacher, department leader, and finally secondary school principal at an international school high in the Andes mountains of Colombia, I have come to learn that professional training, years of ex-

perience, good intentions and enthusiasm, while definitely important, are no guarantee for success in the international school setting.

In the first instance, realize it is still tough to get the best overseas jobs. With so many candidates available from all around the world (viz., the teacher glut isn’t just in Ontario), all international schools—not just high-paying ones in sought-after destinations—can be picky. Previous international experience is highly valued, and most schools require at least two years of full time experience (which does not count summer school, supply, or practice teaching). So while there are schools willing to hire new or recent graduates, candidates need to be *very* flexible about where they end up, and thus about salary expectations and living and working conditions.

Don’t underestimate this: some international schools are cutting edge institutions with abundant resources better than our own, while other schools—especially in devel-

## TEACHING THE WORLD

oping countries—well off by their domestic standards, simply cannot afford resources we may take for granted. Even *within* countries schools will vary widely in terms of quality. This makes it more difficult to anticipate the conditions you will likely encounter in your overseas placement.

Add to this the inevitable consequences of the contract structure. International schools typically offer two-year agreements, albeit with possible resigning bonuses. While this is appealing for those who get into overseas teaching as a way to explore the world, it entails inherently high foreign staff turnover and the attendant danger of a revolving door mentality in schools. This can harm school culture in significant ways including making those vital collegial relationships with other teachers much more difficult to build and maintain—even more acute between foreign and locally hired teachers. It can also lead students to see you as transient and thus peripheral in their lives, making it harder to develop the trust and respect necessary to build good relationships, manage discipline and teach effectively, compounding the strain of handling students from privileged families in cultures where teachers may, to be blunt, not be esteemed as professionals in quite the same way as here in Canada.

You get the picture. And so you really have to ask yourself whether you have the qualities required to traverse a landscape so fraught with uncertainty.

Fortunately, it turns out there *are* qualities, among which the most important is something called *cultural intelligence* or “CQ”, that better predicts a teacher’s ability to succeed in the overseas classroom. As a recruiter, I sought to discern CQ in teacher candidates, and as an educational leader I strove to foster it in my staff to help them not only survive but *thrive* with our admittedly demanding and culturally unique students. For me, the importance of cultural intelligence isn’t just about how it can help us cope with culture shock as *individuals* (although it can), but how it can help us to interact more effectively with our colleagues and students *professionally*. Both my experience and research shows that it is our professional success that is most highly correlated with satisfaction and longevity in the international school setting.

As outlined by David Livermore, author of *The Cultural Intelligence Difference* and founder of the *Cultural Intelligence Centre*, CQ is a person’s “level of effectiveness working across cultures” and is derived from four key qualities: “an interest and motivation in cross cultural issues, a good grasp of cultural similarities and differences, awareness and planning in light of cultural understanding, and an ability to appropriately adapt behaviour when engaging cross-culturally.” This quality of adaptability is also noted by Richard Bucher, author of *Building Cultural Intelligence - Nine Mega-skills*, who stresses that the key to CQ is how it

can “enable us to appreciate multiple perspectives and make appropriate adjustments in our behavior” so that we are “much better able to quickly adjust and relate effectively to others whose backgrounds are not at all like ours.” It’s rather like the “simple lesson” taught by Atticus Finch in *To Kill a Mockingbird*, that you need to be able to put yourself in someone else’s shoes and someone else’s culture. But it’s more: to work successfully overseas requires significant cultural flexibility and capacity to adapt, certainly with your colleagues from diverse cultural backgrounds given the inevitable frustrations that can arise among teachers whose cultural and pedagogical backgrounds are so diverse.

But with your students, it’s simply paramount. It’s in the classroom that your CQ will help you most teaching overseas. As educators we must constantly examine not only how we teach, but what we teach and why we teach it. Being culturally flexible, adaptable and self-aware will serve you more than anything else in your overseas classroom, as you work to build those relationships of trust and respect so essential to successful teaching and learning. The ability to reorient one’s self, to be self-aware and adaptable is fundamental to this success and goes far beyond mere cultural awareness. You need to really accept that when you go overseas, you do so not so much to change the world, but be changed by it.

Teaching overseas can be an amazing life-long adventure and opportunity for continuous per-

sonal growth, lucrative to boot. But in the end, you really have to care about the students you work with. It truly is possible to teach the world, but you have to do it one student at a time. And that begins with you.

*Grant Sundal taught in Ontario’s public system for 16 years before moving overseas to Colombia. After five life changing years as a teacher and administrator in South America, he is now moving on to the United Arab Emirates.*

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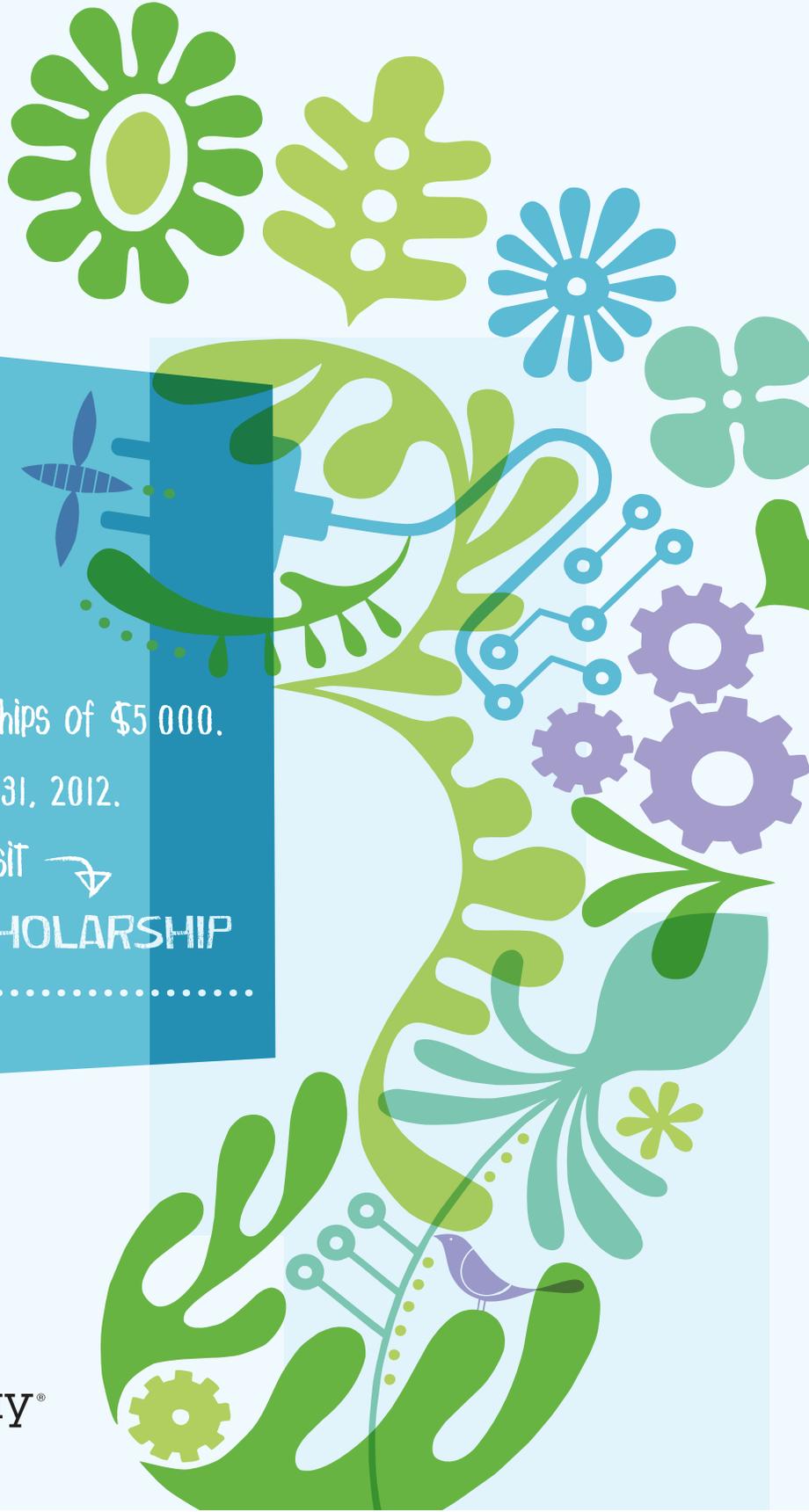
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## **GoGo News**

**[www.gogonews.com](http://www.gogonews.com)**

GoGoNews publishes current events of the world for young students in an educational and kid-friendly format. Visitors can also read about general knowledge topics in addition to developing a deeper consciousness and awareness of the world they live in. GoGoNews is not all serious though, as a site geared toward kids, it also has fun and uplifting articles that contrast the hard news.

## **TerraCycle**

**[www.terracycle.com](http://www.terracycle.com)**

TerraCycle is an international initiative aiming to help eliminate waste through collection and solution programs for all kinds of typically non-recyclable waste. The waste collection programs are nicknamed “brigades” and collect all sorts of waste from candy wrappers to pens. The collected waste is then turned into new products and materials, ranging from recycled park benches to upcycled backpacks. When students send in their waste to TerraCycle, they’re awarded points that can be redeemed for a variety of charitable gifts. Gifts range from providing a vulnerable family in a developing country with a month’s supply of feed for their livestock to helping young a girls’ school receive drinking water and clean sanitation facilities for a month.

## **The Healthy Aboriginal Network**

**[www.thehealthyaboriginal.net](http://www.thehealthyaboriginal.net)**

The Healthy Aboriginal Network is a non-profit organization that produces bilingual comic books and DVDs that raises awareness on health and social issues for today’s youth.

Sample titles include, *Darkness Calls* focuses on a teenager who is bullied at school, misunderstood by his teacher and feels socially isolated from his family. He finds one day very overwhelming and considers taking his own life.

*Level Up* tells the story of Terry who is contemplating dropping out of school. But before he does, he’s asked to spend some time with his cousin Dave, a successful game developer. Rather than lecture Terry, Dave makes the importance of school relatable - he compares education to moving up a level in a video game.

Teachers can order the books directly from the website and watch a short video showing focus groups test the stories and images with youth and health professionals.



# CURRICULA

## CANADA'S CAPITAL TREASURES

**FOR GRADES:  
6 TO 9**

### Series Introduction

Seven classroom-ready lesson plans and five introductory videos highlight and explore the significance and importance of Canada's Capital Treasures. These treasures represent knowledge, sacrifice, commitment and ingenuity. This series of lesson plans is available for download at [www.teachmag.com/curricula](http://www.teachmag.com/curricula). These lesson plans were produced by the National Capital Commission (NCC) in collaboration with the Virtual Museum of Canada and TEACH Magazine.



- Use writing skills to create a brief historical narrative based on the building of the canal;
- Find out more about planning a commemorative monument;
- Understand that a variety of places, including waterways and landscapes, can reflect aspects of heritage, history and culture;
- Explore the storyboarding of informational videos.

### Keywords

Rideau Canal; Colonel John By; Rideau Canal locks; Bytown Museum

### Introduction

Can a stretch of water be a national symbol? If it's the Rideau Canal, it can!

Defined by a series of 47 locks and two-dozen dams, the Rideau Canal connects Kingston to the Ottawa River, a distance of more than 200 kilometres. Built between 1826 and 1832, it remains an engineering marvel, and the longest continuously operating waterway in North America — not to mention its winter transformation into the world's largest skating rink!

But this UNESCO-designated World Heritage Site is more than just a series of facts and figures: the canal defined a nation, created a capital and symbolizes Canada's dedication to preserving its historical past.

The city of Ottawa grew at the confluence of the Ottawa, Rideau, and Gatineau rivers. Long used as transportation corridors by Aboriginal peoples, the waterways led into the vast hinterland of the Canadian Shield. After the War

## LESSON THREE: RIDEAU CANAL LOCKS

### Materials

Rideau Canal locks video:

[www.canadascapital.gc.ca/capital-treasures](http://www.canadascapital.gc.ca/capital-treasures)

### Learning Objectives

The learner will:

- Discover more about Canadian-US relations, particularly in the 19th century;
- Use mapping skills to outline an annotated journey;



## Bytown Museum and Rideau Canal locks, 2006

Photo: National Capital Commission

One of the first buildings John By built was the Commissary; today, it is the Bytown Museum and the oldest masonry structure in Ottawa. It is located to the left of the step locks in this photo, with the Ottawa River and the Canadian Museum of Civilization in the background.

of American Independence, Britain feared that supply lines along the St. Lawrence River could be easily disrupted by any conflict with America. In 1826, the British government sent Colonel John By to build an alternative transportation

route linking central Canada with the Atlantic, via Montréal.

Over the course of the next six years, Colonel By and his team of Royal Engineers mapped out a daring course through wilderness, swamp, and tough Canadian Shield rock. French Canadian and newly immigrated Irish workers supplied most of the back-breaking labour. Accidents and illness claimed the lives of many.

The canal joined the Ottawa River with one last engineering miracle: the step locks just below what is now Parliament Hill. At the locks, the Rideau Canal is more than 24 metres above the river. Without a solution, the canal would have ended in a waterfall. Instead, By built a series of eight hand-winch step locks that raise and lower watercraft like a slow-moving escalator. Attempts to modernize the mechanism were met by the vocal opposition of the heritage community; today, the locks are still opened and closed by hand. You can see an example of this in the video, Rideau Canal Locks.

In creating a transportation corridor linking central and eastern Canada, John By accomplished a close-to-impossible task. Surely, his British taskmasters celebrated his military and engineering triumph? Unfortunately for By, unauthorized expenditures led the British government to blame him for canal cost overruns. Today, By is regarded as the ingenious hero who created Canada's Capital, but his final years were spent attempting to clear his name of accusations of financial mismanagement.

Thanks to By's tenacity and an influx of canal workers, the little lumber town on the shores

of the Ottawa River became Bytown. By 1855, the growing community was renamed Ottawa and, a few short years later, Queen Victoria selected Ottawa as the capital of the province of Canada. The queen had five cities to choose from: Toronto, Montréal, Kingston, Québec, and Ottawa. But Ottawa's advantages were clear: the city was on the boundary between Upper and Lower Canada; it was a safe distance from the U.S. border; and it was easily accessible, mostly because of the Rideau Canal.

### Activity One: Write a Short Paper

The British government was worried about disruptions to their supply lines if a war with America broke out. Using library and Internet resources, find out why the British were worried about this. Did they have a strong case? Argue your opinion in a short paper outlining the British position and exploring any alternatives to a massive construction project like the Rideau Canal.

### Activity Two: Take a Virtual Trip!

Is the Rideau Canal used today? Draw a map of the canal from Kingston to Ottawa and include the types of activities that visitors can experience along the way. Imagine the region 50 years from now. What would the canal be like in the future?

### Activity Three: A Colonel By Monument

In his lifetime, Colonel John By went from hero to villain. Remembering his ingenuity and dedication can be done in many ways, from monuments to special events. As a class, discuss the pros and cons of permanent monuments versus more transient events or commemorations. With a small group, propose an event, monument, or other commemoration to celebrate By's achievements.



### Rideau Canal locks, 2007

Photo: National Capital Commission

From the lowest level, the locks appear to climb the hillside like a staircase. The Fairmont Château Laurier (left) is a hotel; the Bytown Museum (right) is housed in a building that John By constructed. The winches that open and close each lock are in the foreground.

### Alternative activity:

Many others helped Colonel By, including the labourers who built the canal and the Royal Engineers who came up with solutions to the various technical challenges. Propose a method to commemorate their achievements.

### Activity Four: Making a Capital

Capital cities around the world are selected for numerous reasons. As a class, brainstorm some of them. Some cities are created specifically to become capitals, others are the oldest or most successful cities in the country. Think about why Queen Victoria chose Ottawa as the capital. What other cities were considered? Imagine that a new capital was needed for Canada. Divide into five or six groups. Choose a potential city



such as Vancouver, Calgary, Winnipeg, Toronto, Montréal, or Halifax, or suggest another location (including a purpose-built capital) and, as a team, argue the benefits and potential of your city. How do you think a decision should be made?

### **Activity Five: Individual Research and Class Discussion**

- Building the Rideau Canal involved many engineering firsts. Research the scientific aspects of building the canal and present them to the rest of your class.
- Preserving our history is an important way not only to remember the past, but also to learn from it. Research UNESCO world heritage sites. What types of sites receive the designation? Are any heritage sites near your community? In a short paper, discuss a Canadian UNESCO heritage site

and outline why it received the designation.

### **Activity Six: Renaming Communities (Grade 7)**

The settlement of Bytown was founded in 1826 and named after Colonel John By, but then, in 1855, it became a city and was renamed Ottawa. Find out the reasons for this change. What is your opinion about that decision? Many places in Canada have been renamed over the centuries. Many places originally had Aboriginal names, but were renamed by English or French settlers. More recently, place names have been changed for political reasons. Find out whether the name of the place where you live, or any places near you, have been renamed, and if so, why. How would you feel if the place where you live now

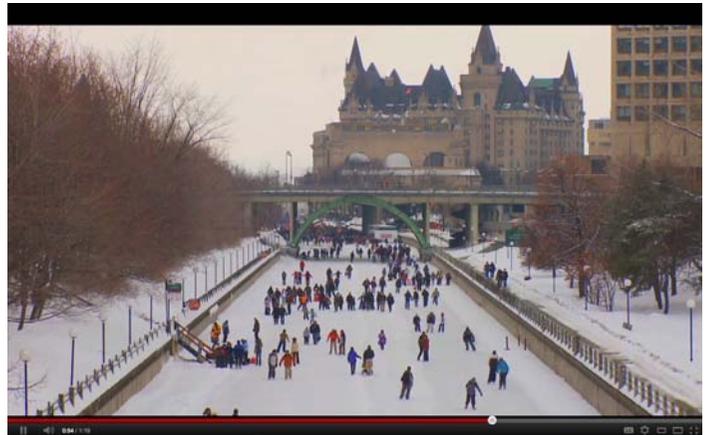
was renamed next year? If the place had to be renamed, what kind of a process would you want put in place to decide on the new name?

### **Activity Seven: Bridging the River (Grade 8)**

Canals are created in order to facilitate the movement of boats and other water transport. However, engineers also had to consider how to provide opportunities for land transportation, such as railways, cars, horses and carts, as well as pedestrians, to cross the waterways. When the Rideau Canal was built, the engineers built several types of causeways or bridges, including elevated railway bridges and swing bridges. Look for photos of these online and research how these bridges worked and whether or not they have all been replaced with newer designs. With a partner, make an annotated diagram or model of a specific bridge that crosses the Rideau Canal and locate it on a map.

### **Activity Eight: Writing about the Building of the Canal (Grade 9)**

Write a short story or script that is set during the building of the Rideau Canal (1826-1832). Include at least one dramatic scene. Research to find out more about the history of the Canal to jumpstart your ideas. For example, about 2000 people worked to build the Canal during each year of its construction. Most came from Ireland, fleeing poverty and famine. More than 500 workers died during the building of the Canal due to blasting accidents, drowning, or disease. (A monument to honour these workers now stands close to Parliament Hill.) Be sure the historical details in your narrative are accurate.



### **Media Literacy Activity**

View the video “Rideau Canal Locks.” One way that videographers create films is to prepare a storyboard before filming. Of course, they may change their minds after they have completed the videoing and include or delete elements, but the storyboard provides them with a basic framework in which to work. View the video again, pausing it when you wish. What are the main scenes in the video? Jot down a brief description of each main scene with some details, for example, first there is a close-up summer scene of the locks, etc. Then, create a storyboard in simple panels to show the basic sequence of shots that make up the scenes of Rideau Canal Locks and approximately how many seconds each scene takes. Reflect on the decisions made by the creators. If they needed to reduce the video down to 40 seconds, what would you suggest they cut and why? Block this out on your storyboard and see whether it would work. If Rideau Canal Locks could be increased by 60 more seconds, what would you suggest be included? Adapt your storyboard to show this additional content.



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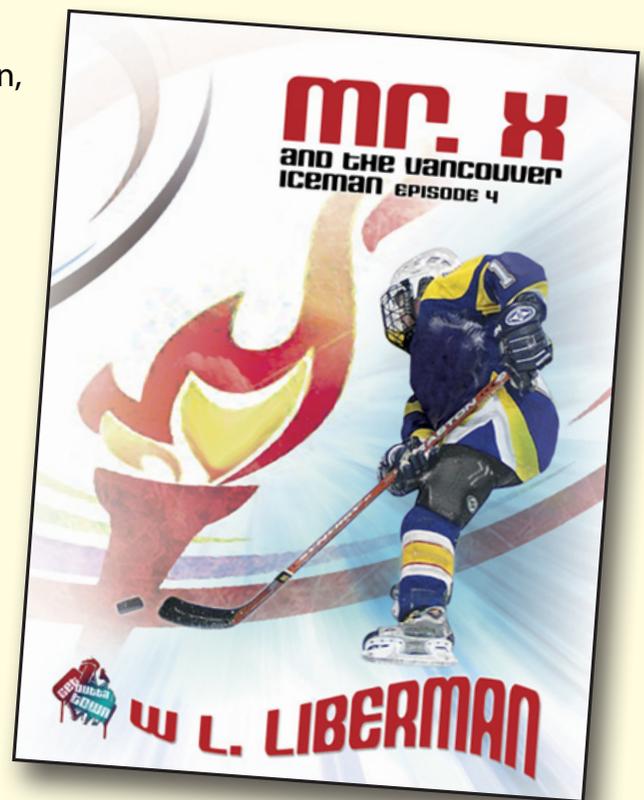
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## LES TRÉSORS DE LA CAPITALE DU CANADA

### ANNÉES :

De la 6<sup>e</sup> année du  
primaire à la 3<sup>e</sup> année  
du secondaire au  
Québec; de la 6<sup>e</sup> à la  
9<sup>e</sup> année en Ontario

### Introduction

Sept plans de leçon prêts à être utilisés en salle de classe et cinq vidéos d'introduction soulignent et expliquent brièvement la signification et l'importance des trésors de la capitale du Canada. Ces derniers représentent le savoir, le sacrifice, l'engagement et l'ingéniosité. Téléchargez cette série de plans de leçon en visitant la rubrique Curricula de TEACH Magazine – Le Prof à l'adresse [www.teachmag.com/curricula](http://www.teachmag.com/curricula). Produits par la Commission de la capitale nationale (CCN) en collaboration avec le Musée virtuel du Canada et TEACH Magazine.



## 3<sup>e</sup> LEÇON : LES ÉCLUSES DU CÂNAL RIDEAU

### Matériel

Vidéo « Les écluses du canal Rideau » :  
[www.capitaleducanada.gc.ca/tresors-capitale](http://www.capitaleducanada.gc.ca/tresors-capitale)

### Objectifs d'apprentissage :

En participant à une ou plusieurs des activités  
qui suivent, les élèves :

- en apprendront davantage sur les relations  
Canada–États-Unis, surtout au XIX<sup>e</sup> siècle;

- se serviront de leurs habiletés en cartographie  
pour tracer un parcours annoté;
- se serviront de leurs habiletés en rédaction  
pour écrire un court récit historique sur la  
construction du canal;
- en sauront davantage sur la planification d'un  
monument commémoratif;
- comprendront que des endroits variés, y  
compris les voies de navigation et les paysages,  
peuvent refléter des facettes du patrimoine, de  
l'histoire et de la culture;
- découvriront comment se font les scénarios-  
maquettes de vidéos informatives.

### Mots clés

Canal Rideau, colonel John By, écluses du canal  
Rideau et Musée Bytown

### Introduction

Un cours d'eau peut-il être un symbole national?  
S'il s'agit du canal Rideau, la réponse est oui!

Constitué d'une enfilade de 47 écluses et de  
deux douzaines de barrages, le canal Rideau relie  
Kingston à la rivière des Outaouais, une distance  
de plus de 200 kilomètres. Construit entre 1826  
et 1832, il demeure une merveille de l'ingénierie  
et la plus longue voie de navigation toujours  
praticable en Amérique du Nord, sans oublier  
qu'en hiver, il devient la plus grande patinoire du  
monde!

Mais ce site du patrimoine mondial de l'UNESCO  
est plus qu'une suite de faits et de données : le  
canal a défini une nation, créé une capitale et  
symbolise la volonté du Canada de préserver  
son patrimoine historique.



### Photo de l'incendie de 1916

**Photo : Bibliothèque et Archives Canada**  
Après l'incendie de 1916, seule la Bibliothèque du Parlement est restée debout. Les observateurs disent avoir entendu la cloche sonner avant de s'effondrer sur le sol. Les travaux de construction des nouveaux édifices ont commencé presque aussitôt.

La ville d'Ottawa s'est développée au confluent des rivières Rideau, Gatineau et des Outaouais. Longtemps utilisées comme corridors de transport par les peuples autochtones, les voies de navigation menaient au vaste arrière pays du Bouclier canadien. Après la guerre de l'Indépendance américaine, la Grande-Bretagne craignait que les voies d'approvisionnement longeant le fleuve Saint Laurent puissent facilement être coupées en cas de conflit avec les États-Unis. En 1826, le gouvernement de la Grande-Bretagne envoyait le colonel John By construire un parcours de transport de rechange reliant le Canada central à l'Atlantique en passant par Montréal.

Le colonel By et son équipe des Royal Engineers ont consacré les six années qui suivirent à tracer un audacieux parcours à travers le milieu sauvage, les marécages et le roc du Bouclier canadien. Les Canadiens français et les travailleurs irlandais qui venaient d'immigrer ont accompli la majeure partie du dur labeur. Des accidents et la maladie ont causé bien des décès.

Le canal a rejoint la rivière des Outaouais grâce à un dernier miracle de l'ingénierie : les écluses en escalier au pied de ce qui est aujourd'hui la colline du Parlement. Aux écluses, le canal Rideau se trouve à plus de 24 mètres au dessus de la rivière. À défaut de solution, le canal se serait transformé en chute au terme de son parcours. Au lieu de cela, le colonel By a construit une suite de huit écluses en escalier actionnées par des treuils à manivelle qui montaient et descendaient les navires comme un escalier roulant à progression lente. Les tentatives de moderniser le mécanisme ont soulevé l'opposition des défenseurs du patrimoine; de nos jours, les écluses sont toujours ouvertes et fermées à la manivelle. Visionnez la vidéo « Les écluses du canal Rideau » pour voir un exemple.

En créant ce corridor de transport reliant le centre et l'est du Canada, John By a réussi l'impossible, ou presque. Ses supérieurs britanniques ont sans doute célébré ce triomphe du génie militaire... Malheureusement pour le colonel By, des dépenses non autorisées ont amené le gouvernement britannique à le blâmer pour les dépassements de coûts du projet. Aujourd'hui, John By est considéré comme le héros ingénieux qui a créé la capitale du Canada, mais il a passé les dernières années de sa vie à tenter de

blanchir son nom des accusations de mauvaise gestion financière.

Grâce à la ténacité du colonel By et à l'arrivée des travailleurs du chantier du canal, la petite ville forestière des berges de la rivière des Outaouais est devenue Bytown. En 1855, la collectivité en pleine expansion a été rebaptisée Ottawa et, quelques années plus tard, la reine Victoria a choisi Ottawa pour capitale de la province du Canada. La reine avait le choix entre cinq villes: Toronto, Montréal, Kingston, Québec et Ottawa. Mais les avantages d'Ottawa étaient évidents : la ville était située à la frontière du Haut et du Bas Canada; elle se trouvait à bonne distance de la frontière américaine et elle était facile d'accès, principalement grâce au canal Rideau.

### **1<sup>re</sup> activité : Rédigez un court texte**

Le gouvernement de la Grande-Bretagne craignait que ses voies d'approvisionnement puissent être coupées si un conflit éclatait entre le Canada et les États-Unis. En vous servant des ressources de la bibliothèque et d'Internet, trouvez pourquoi les Britanniques craignaient cela. Avaient-ils de bonnes raisons de s'inquiéter? Appuyez votre opinion d'arguments dans un court texte expliquant le point de vue des Britanniques et explorez des solutions de rechange à un grand projet de construction comme celui du canal Rideau.

### **2<sup>e</sup> activité : Faites un voyage virtuel!**

Le canal Rideau sert-il encore de nos jours? Dessinez la carte du canal de Kingston à Ottawa et indiquez à quelles activités les gens en visite



### **Festivités de la fête du Canada, 2008**

**Photo : Commission de la capitale nationale**  
Le parterre gazonné qui se trouve au pied de la tour de la Paix est le lieu de rassemblement du Canada, là où nous célébrons les événements marquants et où nous nous souvenons de ceux et celles qui nous ont quittés.

peuvent s'adonner le long du trajet. Imaginez la région dans 50 ans. De quoi aura l'air le canal dans l'avenir?

### **3<sup>e</sup> activité : Un monument au colonel By**

Durant sa vie, le colonel John By est passé du statut de héros à celui de vilain. On peut rappeler le souvenir de son ingéniosité et de son dévouement de nombreuses façons, par l'érection d'un monument comme par l'organisation d'activités spéciales. En classe, discutez des pour et des contre des monuments érigés en permanence par rapport à ceux des activités ou d'autres types de commémoration plus transitoires. En petits groupes, proposez une activité, un monument ou une autre forme de commémoration pour souligner les réalisations du colonel By.



### **Activité de remplacement :**

Nombreux sont les gens qui ont aidé le colonel By, y compris les travailleurs qui ont construit le canal et les Royal Engineers qui ont trouvé des solutions aux nombreux défis techniques. Suggérez une façon de commémorer leurs réalisations.

### **4<sup>e</sup> activité : La construction d'une capitale**

Plusieurs raisons déterminent le choix des capitales du monde. En classe, remuez vos méninges pour en trouver quelques-unes. Certaines villes sont créées précisément pour devenir des capitales; d'autres sont les plus anciennes du pays ou celles qui connaissent le plus de succès. Réfléchissez aux raisons qui ont amené la reine Victoria à choisir Ottawa pour capitale. Quelles autres villes ont été envisagées? Imaginez que le Canada ait besoin d'une nouvelle capitale. Divisez-vous en cinq ou six groupes. Choisissez une ville qui pourrait être candidate, par exemple, Vancouver, Calgary, Winnipeg, Toronto, Montréal ou Halifax, ou suggérez un autre endroit (y compris une capitale construite expressément à cette fin). En équipe, discutez des avantages et des possibilités qu'offre votre ville. De quelle façon devrait-on prendre cette décision?

### **5<sup>e</sup> activité : Recherche personnelle et discussion en classe**

- a) La construction du canal Rideau a d'abord et avant tout nécessité le savoir-faire de nombreux ingénieurs. Faites une recherche sur les aspects scientifiques de la construction du canal et présentez-les à votre classe.
- b) Préserver notre histoire est important pour se souvenir de notre passé, mais aussi pour apprendre de notre passé. Faites une recherche sur les sites du patrimoine mondial de l'UNESCO. Quels types de sites ont été désignés? Y a-t-il des sites du patrimoine près de votre collectivité? Rédigez un court texte sur un site canadien du patrimoine de l'UNESCO et expliquez pourquoi il a été désigné.

### **6<sup>e</sup> activité : Renommez les collectivités (7<sup>e</sup> année ou 1<sup>re</sup> année du secondaire au Québec)**

Le village de Bytown a été fondé en 1826 et nommé d'après le colonel John By. Toutefois, en 1855, le village est devenu une ville et a été renommé Ottawa. Trouvez les raisons de ce changement. Que pensez-vous de cette décision? De nombreux endroits au Canada ont été renommés au cours des siècles. Certains portaient des noms autochtones à l'origine et ont été renommés par des colons français ou anglais. Récemment, des endroits ont été renommés pour des raisons politiques. Trouvez si l'endroit où vous habitez, ou n'importe quel autre endroit près de chez vous, a été renommé et, si oui, pourquoi. Comment réagiriez-vous si l'endroit où vous habitez changeait de nom l'an prochain? Si l'endroit devait être renommé, quel genre de processus devrait être mis en place, selon vous, pour choisir le nouveau nom?

## 7<sup>e</sup> activité : Des ponts pour traverser la rivière (8<sup>e</sup> année ou 2<sup>e</sup> année du secondaire au Québec)

Les canaux sont bâtis pour faciliter le déplacement des bateaux et des autres moyens de transport par eaux. Cependant, les ingénieurs ont également pensé aux façons de se déplacer par terre, telles que le chemin de fer, la voiture, le cheval et la charrette et la marche, pour traverser les cours d'eau. Lorsque le canal Rideau a été bâti, les ingénieurs ont construit plusieurs types de ponts jetés ou ponts, y compris des ponts ferroviaires et des ponts tournants aériens. Dans Internet, cherchez des photos de tels ponts et faites une recherche sur la façon dont ils fonctionnent. Ont-ils été remplacés par des ponts plus modernes? Avec un ou une camarade de classe, faites un diagramme ou un modèle commenté d'un des ponts qui enjambent le canal Rideau et trouvez-le sur une carte.

## 8<sup>e</sup> activité : Rédigez un court texte sur la construction du canal (9<sup>e</sup> année ou 3<sup>e</sup> année du secondaire au Québec)

Rédigez une courte histoire ou un script qui se déroule pendant la construction du canal Rideau (1826-1832). Le texte doit comprendre une scène dramatique. Faites une recherche pour en savoir davantage sur l'histoire du canal et vous donner des idées. Par exemple, environ 2 000 personnes ont travaillé à la construction du canal chaque année de sa construction. La plupart d'entre elles venaient d'Irlande, fuyant la pauvreté et la famine. Plus de 500 travailleurs y ont perdu la vie dû à des explosifs, à la noyade ou à la maladie. (Un monument a été érigé près de la colline du Parlement afin de leur rendre hommage.) Assurez vous de l'exactitude des détails historiques de votre texte.



## Activité de littératie critique

Visionnez la vidéo « Les écluses du canal Rideau ». Une des façons dont les vidéographes créent des films consiste à faire un scénario-maquette avant de filmer. Bien entendu, ils peuvent changer d'idée après avoir terminé le tournage et inclure ou éliminer des éléments, mais les scénarios-maquettes leur donnent un cadre à suivre. Regardez la vidéo de nouveau en appuyant sur pause au besoin. Quelles sont les principales scènes de la vidéo? Notez une brève description de chacune des scènes avec quelques détails, par exemple, le gros plan des écluses en été, etc. Ensuite, créez un scénario-maquette en groupe pour montrer le plan-séquence des scènes des « Écluses du canal Rideau » et notez la durée approximative de chacune des scènes. Réfléchissez sur les décisions des créateurs. Si l'on écourtait la vidéo à 40 secondes, que supprimeriez-vous et pourquoi? Éliminez cet extrait de votre scénario maquette. Est-ce que ça fonctionne? Si l'on allongait « Les écluses du canal Rideau » de 60 secondes, que devrait-on ajouter, selon vous? Adaptez votre scénario maquette pour montrer ce contenu supplémentaire.