Access4All Educator Resource
Secondary

Rick Hansen Foundation

Access4All

CANADA 150

A Note from Rick Hansen:

I'm delighted you have decided to use this Access4All Barrier Buster Educator Resource.

In 2017, Canada celebrates its 150th birthday. 2017 also marks the 30th anniversary of the end of my Man in Motion World Tour. What better way to mark these two occasions than the Access4All Canada 150 Signature Initiative, with the participation of the Government of Canada! Access4All inspires and empowers youth and community leaders from coast to coast to keep the dream of a world without barriers alive, working with their local communities to build a more inclusive and accessible Canada.

I hope you'll use this Educator Resource to help your students learn more about the importance of inclusion and accessibility, identify physical barriers to accessibility in the places we live, work, and play, and undertake **Barrier Buster projects** to remove those barriers. The Rick Hansen Foundation will award grants of up to $30,000 to Barrier Buster projects and celebrations across the country.

I also encourage you to book a **free Rick Hansen Ambassador presentation** for your school. Ambassadors are people with disabilities trained to deliver impactful presentations that highlight the importance of access and inclusion.

Over the past 30 years, the Rick Hansen School Program has provided lessons, activities, and resources to help students across Canada learn more about people with disabilities, how they overcome obstacles, and how we can all contribute to making the world a more inclusive place for everyone. Today, people with disabilities have more opportunities than ever before.

However, I believe our best work lies ahead of us. By taking both large and small steps towards removing barriers, we can develop young leaders and leave a lasting legacy for Canada's 150th.

Thank you for your hard work and dedication to educating and empowering students throughout Canada. I am incredibly proud to support you and wish you every success.

Together, anything is possible!

Sincerely,

Rick Hansen, C.C., O.B.C.
CEO, Rick Hansen Foundation

Introducing Access4All

The Rick Hansen Foundation is excited to launch Access4All, a Canada 150 Signature Initiative, with the participation of the Government of Canada, to inspire and empower Canadians to build a more inclusive and accessible country in honour of our nation's 150th birthday.

Schools are invited to create Barrier Buster teams to assess the built environment, identify barriers, and apply innovative thinking to solve accessibility issues. Teams are encouraged to apply for funding of up to $30,000 to undertake an infrastructure project and associated awareness celebration that will increase accessibility of their school or other public place in their community, and create a legacy of accessibility for future generations.

Barrier Busters grants are available to make your exciting project a reality!

For details on how to apply for funding through the Access4All Barrier Buster Fund, visit www.rickhansen.com/access4all.

What is the Access4All Barrier Buster Educator Resource?

This easy-to-use Access4All Educator Resource provides a framework to increase understanding of disability, access and inclusion, and assist the development of effective student Barrier Buster projects that increase accessibility in the built environment for people with mobility or vision challenges, and people who are D/deaf or hard of hearing.

The activities in this Educator Resource provide a fun and highly effective way for students and student groups to:

- Improve the accessibility of schools and local communities
- Raise awareness and increase understanding of physical disabilities (vision, hearing, and mobility)
- Develop teamwork, leadership, creative thinking, and innovation skills.

Step 1. Warm-Up

Understand disability and accessibility

A. Assess background knowledge

Goal: Assess students' background knowledge of disability and accessibility.

Activity 1: Exploring through KWL
Students review what they know about disabilities and accessibility by using a **Know, Would Like to Know, Learned (KWL) Chart**. (Instructions in Appendix B).

After the activity, assess if students require more background knowledge. If so, use the resources outlined in the following section.

B. Build background knowledge

Goal: Build student awareness of challenges and barriers in the built environment for people with disabilities and address common misconceptions about people with disabilities.

We recommend that you introduce students to disability, accessibility, and inclusion by using the following free resources available through the Rick Hansen Foundation.

1) Rick Hansen School Program: Abilities In Motion Toolkit
www.rickhansen.com/AbilitiesInMotion

Resources that raise awareness of disabilities, accessibility and inclusion, and teach key skills such as teamwork, communication and leadership using innovation, inquiry and problem-solving. The Secondary toolkit includes lessons and hands-on projects in the curriculum areas of Design and Technology, Science, English Language Arts\Media Literacy, Physical Education and Social Studies.

2) Rick Hansen Ambassador presentation
Rick Hansen Ambassadors are people with disabilities trained to engage K to grade12 students through live and online presentations.

An Ambassador presentation is a powerful way to demonstrate to your students the potential of anyone to make a positive difference in the world and to create a personal connection to the importance of accessibility, inclusion, and the potential of people with disabilities.

To learn more about Rick Hansen Ambassadors go to www.rickhansen.com/Ambassadors or contact schools@rickhansen.com or 1.800.213.2131.

If an Ambassador is not available you may wish to use our video of a young Rick Hansen Ambassador talking about her life (www.rickhansen.com/EmilyVideo) or invite a local guest speaker with a disability to speak to your students.

3) Rick Hansen Foundation: Changing the Conversation about Disability video, available at https://youtu.be/Hha9XkXa0qM

C. Create engagement

Goal: Connect students to the challenges faced by people with vision, hearing, and mobility disabilities and get them excited about their project.

Activity 2: Scenario Analysis
In groups students discuss how having a vision, hearing or mobility disability would affect their experiences in a number of everyday situations. (Instructions in appendix B).

Other possible activities:

- Ask students if they know anyone with a disability and can share some information about that person.
- Ask students to research a famous person with a disability and present their story to the class.
- Share the story of an individual with a disability through a case study or video. Some suggestions:
    - Personal stories of people with disabilities (Appendix C)
    - Rick Hansen Ambassador stories and videos at www.rickhansen.com/AmbassadorBios
    - Ted Talks (Appendix C)
- Share and discuss interesting disability facts and statistics (Appendix D)

We encourage you to connect with a local disability organization to learn more about their work.

Step 2. Let's Get Started!

Identify Barriers

Activity 3: Accessibility Checklist
Students assess the accessibility of their school or a community building (Instructions in Appendix B)

Using the completed Accessibility Checklist in groups, students identify:

- The accessibility rating of the building that they assessed
- Top accessibility features
- Areas for improvement/barriers

Teaching Tip

Ask groups to write their findings on chart paper. Assign a team leader to briefly share their group's discussions. Post charts and have students rotate to read each chart to identify similarities and differences in their responses.

Step 3. Create

Identify a Barrier Buster project

A. Identify possible solutions and projects:

Goal: Select a solution and a project to remove a specific barrier identified in Step 2.

Ask students to list possible **solutions** to address the areas for improvement/barriers identified in Step 2.

Next, ask students to brainstorm activities and **projects** that could make each solution happen. Depending on complexity, projects might require students to:

1. Take direct action (e.g. arrange for a ramp to be built)
2. Raise funds (e.g. apply for an **Access4All Barrier Buster grant** from the Rick Hansen Foundation, apply for local and federal grants, or organize a fundraising event)
3. Advocate (e.g. write to business and government leaders highlighting why a ramp should be built)

Teaching Tip

Create a tool to record barriers, solutions, and projects (e.g. chart paper, sticky notes, mind maps). Many online tools are available, for example:

- www.bubbl.us
- www.text2mindmap.com
- www.mindmeister.com
- www.wisemapping.com

Students may wish to review the list of suggested solutions and Sample Barrier Buster Projects (Appendix A) for ideas.

For example:

Barrier	Solution	Student Project
People with disabilities cannot find parking close to the entrance.	Accessible parking space	Designate and label an appropriately sized and located parking space as an accessible parking space.
It is hard to get around our school if you are D/deaf and can't verbally ask for directions, or if you have low vision.	Clear signs	Make or purchase and put up easy-to-read signs with big font size, easy-to-read font type, symbols, and braille.
Doors are heavy and hard to open.	Power-operated doors with levers	Raise funds and arrange for the installation of power-operated doors, doors with levers or other accessible alternatives.

Do you want to create innovative ideas for accessibility solutions not outlined in the Sample Barrier Buster Projects (Appendix A)?

Have students analyze their findings from the Accessibility Checklist using a 3R analysis:

- Reflect - What is the accessibility issue?
- Recognize - What causes the issue?
- Respond - What can you do?

Example:

- Barrier: Our hallways are too cluttered with footwear and it creates a barrier for someone using a wheelchair.
- Solution: Shoe cubbies
- Project: Build some shoe cubbies.

Teaching Tip

- **Give plenty of quiet time at the beginning for students to think and write down ideas.**
- **Outline that the initial activity is to generate as many ideas as possible. Everyone shares their ideas and has an opportunity to contribute.**
- **During the brainstorm no one judges the ideas as good or bad, workable or not. Sometimes practical and creative solutions are found when examining ideas that initially seem impossible.**
- **Ideas will be evaluated after brainstorming.**
- **Guide the discussion. Validate contributions and refocus the group as necessary.**
- **Have fun!**

B. Select a project to implement

Determine if the project is to be implemented in small groups or as a whole class. The number of projects you select will depend on the number of students in your group. Typically groups of five or six students work well, but some projects may require a larger group.

Work with your school Principal regarding compliance with relevant policies and procedures required to implement projects. For example, you may need:

- approval from administration officials such as a school Superintendent or Planning & Facilities Department
- to comply with specific health and safety policies, building codes, and regulations as well as gift and donation policies (if fundraising)
- building licenses or permits
- input from qualified professionals such as Engineers, Building Code Experts and Accessibility Teams

Create a list of possible projects. Guide students toward selecting a project that is realistic given the time and resources available.

Possible considerations:

- What resources, including time, would be needed to implement the solution?
- Would our project be eligible for a Barrier Buster grant? See Appendix A or www.rickhansen.com/access4all for the types of projects that are eligible for Access4All Barrier Buster grants
- Which solutions appear to be simple and which might be challenging to implement?
- Which solutions would create the biggest positive impact for people with disabilities?

Teaching Tip

Give each student (either in a group or as a whole class) 10 adhesive dots to allocate as they wish between the possible projects. Students can place all their dots on one project or distribute them between several favourites. Choose the top projects based on the number of dots.

Have Fun!

Once groups are organized each group creates a team name, mascot, and team cheer. Begin and end group work with each team cheer. Provide an area in the school for students to display their team name and project.

Step 4. Action!

Put plans into action

A. Create an action plan

Goal: Create a plan for implementing the selected project, and implement the plan.

Activity 4: Action Planning
Students identify resources needed and create an action plan for their chosen project (Instructions in Appendix B).

Teaching Tip

Encourage students to make sure their action plan is SMART:

S: Specific
The more specific you are, the easier it will be to focus your efforts. What will you do? Who will do each task?

M: Measurable
Make sure each task can be measured (e.g. We will sell cupcakes during three lunch breaks).

A: Achievable
Is your goal realistic given everyone's time, schedules and the resources available?

R: Relevant
Will this task help us achieve our project?

T: Timely
Set a deadline for each task and do your best to stick to it.

Teaching Tip

We encourage student groups to include and consult with people with disabilities throughout the process of identifying and developing their project. For example, you may be able to connect with a Rick Hansen Ambassador or a local disability organization.

B. Deliver your project plan

Ask students to track progress using their action plan and adjust the plan if necessary. Regularly review progress with the students, and provide support, advice, and mentoring as required. Encourage students by giving them specific feedback and posting pictures or measurements of their progress in a common area.

Encourage students to complete a **reflective journal** throughout the project. (**Activity 5**, Appendix B). Alternatively, students can create a blog, twitter feed, or Facebook account to log their progress. We encourage Barrier Buster project teams to take photos throughout the project. Submit these photos with quick summaries

to access4all@rickhansen.com and we'll aim to promote your project on our Rick Hansen Foundation Access4All website and social media channels. Consider filming the project from the outset so that students can post progress or create a video of their accomplishments.

Have Fun!

Part way through the project action plan assemble students to share the progress of their projects. Ask each group to use their team name and cheer to introduce their project. If students have created a blog, twitter feed, or Facebook account they can share information from these platforms or show the progress that has been posted on the rickhansen.com/access4all website.

Teaching Tip

Provide students with a place and time to meet to carry out their action plan. If the project is being completed independently, encourage students to include a meeting date, time, and place in their action plan.

C. Raise funds

If your project is eligible for funding, apply for an Access4All Barrier Buster grant at access4all@rickhansen.com.

Note that Barrier Buster projects may be small, medium or large, but not all may be eligible for Barrier Buster grants. For more information about grant eligibility, go to www.rickhansen.com/access4all.

In addition to the Access4All Barrier Buster grant, do you need to undertake additional fundraising for your project? See Appendix E for some fundraising tips.

Step 5. Celebrate and Reflect

Celebrate and share your vision of a more accessible world.

A. Hold a celebration event

You have changed the world! Let's celebrate and show the world how you have transformed your school and community to be more accessible.

- Host an event to celebrate your accomplishment. Consider inviting the following people to your celebration:
  - School students and faculty, especially those involved in the Barrier Buster project;
  - Parent Advisory Committee members of the school and parents of students who attend the school;
  - Sponsors or companies and individuals or volunteers that may have contributed to your project;
  - Local school board officials;
  - Local politicians and
  - Local media (community or daily newspapers, radio, or TV stations).
- Consider including a school band, official ribbon cutting ceremony, and cake in your event!
- Hire a photographer to take pictures of your project.
- Host a conference, presentation, or workshop to showcase your project and its impact.

B. Evaluation and Reflection

Evaluation focuses on the project's implementation as well as its effectiveness. Discuss with students whether it is possible to determine if the planned action had the intended effect.

Activity 6: Final Assessment and Reflection
Students evaluate their project, reflect on questions, and consider how their project affected their understanding of the importance of accessibility for people with vision, hearing, and mobility disabilities. (Instructions in Appendix B).

Discuss students' reflections, key learning about the process of creating an action plan, and the final results of their action plan.

Teaching Tip

Encourage students to write thank you notes to individuals and groups who supported their project through mentoring, providing resources and opportunities.

Note: If your school has been approved for Access4All Barrier Buster funding, you must submit a final report to the Rick Hansen Foundation upon completion of your project. See rickhansen.com/access4all for the reporting template.

The Rick Hansen Foundation Youth Leadership Summit

A member of your Access4All Barrier Buster project team (along with one chaperone) may be eligible to attend the Rick Hansen Youth Leadership Summit in Ottawa in May 2017. The Summit will bring together young leaders (with and without disabilities) from across Canada, including those who participated in Barrier Buster projects. It will be hosted by Rick Hansen and government/community leaders, providing leadership training for the next generation of champions for people with disabilities.

To apply or nominate a youth leader who has shown exceptional leadership in the area of accessibility and inclusion, visit www.rickhansen.com/access4all.

Appendix A

Appendix A Sample Barrier Buster Projects

A Barrier Buster fund has been created as part of Access4All, a Canada 150 Signature Initiative, funded in part by the Government of Canada. Schools, communities, and project leaders are encouraged to submit proposals for funding up to $30,000 towards projects and associated awareness celebrations to improve accessibility and inclusivity, and to remove barriers in the built environment.

Here is a list of Barrier Buster projects, grouped into some common categories. We encourage you to do multiple accessibility upgrades within a single category or mix and match based on your accessibility needs to create the greatest impact in your community and also maximize your funding potential.

Be sure your project adheres to local building code and that you obtain all necessary consents. It is important to consult with the Principal and your School Board/District. Seek professional advice when unclear. We encourage you to consult with people with disabilities in the design and implementation of your project.

Costs are given for guidance only and may vary by region, and do not include labour or taxes unless specified.

See glossary at end of Appendix A for an explanation of any terms highlighted in red.

Your project could help people with the following disabilities:

Mobility **Vision** **Hearing**

Appendix A Sample Barrier Buster Projects *Continued*

Accessible Play Spaces

Create play spaces that encourage participation and interaction among all children. A combination of active play and rest spots benefits both children and parents/caregivers who supervise them.

Barrier:	• People who use wheelchairs cannot use the playground because the surface is made of inaccessible materials such as woodchips or gravel. • Individuals with visual impairments are not able to use the playground.
Solution:	• Install accessible surfaces in playgrounds and new playground equipment with tactile and sound components. - Replacing inaccessible surfaces (such as woodchips and gravel) with smooth surfaces (such as a rubberized shock-absorbing flat surface) will allow individuals with mobility impairments access to the playground. - Incorporating tactile surfaces and sound allows individuals with visual impairments to use the playground.
Who Benefits:	• Individuals who use a wheelchair or have a mobility impairment. • Children, older adults, seniors, individuals with a temporary disability (i.e. crutches), or people using a stroller. • People of all abilities.
Improvement Ideas:	• Construct accessible equipment. • Add a sheltered, accessible picnic table. • Construct an accessible pathway.
What can students do?	• Use the **"Let's Play Toolkit"** from the Rick Hansen School Program to identify ways the playground can be improved. • Contact a School Administrator or Parent Council member to highlight the need for inclusive play spaces. • Research playground specialists for soft/smooth accessible playground surfaces and accessible playground equipment.

Appendix A Sample Barrier Buster Projects *Continued*

Professionals To Consult	• School Administrator • Architect/Engineer • Code Consultant • Builder/General Contractors • Playground Specialists (i.e. equipment or surfacing)
Sample Costs	• $100,000-$200,000+ • playground surface= $6.59/sq ft-$19.90/sq ft (depending on type of surface material) + installation
Additional Resources	• Rick Hansen Foundation: Guide to Accessible Play Spaces • Rick Hansen Foundation: Accessible Playground Case Studies • Building an Accessible Playground • Accessible Play Surfaces • Longitudinal Study of Playground Surfaces to Evaluate Accessibility • Comparison of Accessible Playground Surfaces

Appendix A Sample Barrier Buster Projects *Continued*

Accessible Parking

Designate accessible parking spaces for individuals with a disability to make it easier for them to gain access to the building.

Barrier:	• There is no accessible parking close to the front door.
Solution:	• Designate and label accessible parking spaces. - Designating accessible parking spaces close to the entrance will make it easier for individuals with mobility impairments to access the building. **Tip: When designing an accessible parking space, ensure that it is near a curb cut (ramp graded down from the top surface of a sidewalk to the surface of an adjoining street) to make it safer and easier to access the building.*
Who Benefits:	• Individuals with a mobility impairment. • Older adults, seniors, individuals with a temporary disability (i.e. crutches), or people using a stroller. • People of all abilities.

Appendix A Sample Barrier Buster Projects *Continued*

Improvement Ideas:	• Designate and label (include vertical and pavement signage) a space with appropriate dimensions and design, and located near building entrance. • Repave or repair the designated parking space surface to ensure it is level, stable, firm and slip-resistant. • Add a shelter to provide protection from weather. • Construct a dedicated curb ramp near the designated space to allow convenient access to the accessible route. • Add a marked crossing to connect designated parking to closest sidewalk.
What Can Students Do?	• Designate and label an appropriately sized and located space(s) as accessible parking space(s).
Professionals To Consult	• Property Manager • Painters • Code Consultant • Construction Contractor
Sample Costs	• Parking Stall (per single line/stripe): $4-$5 • Accessible Stall (symbol w/ blue box): $25-$35 (horizontal signage vs. vertical signage) • Crosswalks (white & blue): $35-$75 • Repaving: $1,000-15,000 • Curb ramp: $10,000-$20,000
Additional Resources	• City of Brampton Accessible Parking dimensions (p.8 & 9) • ADA Accessible Parking Fact Sheet

Appendix A Sample Barrier Buster Projects *Continued*

Exterior Access

Help make it easier for individuals with a disability to get to and from a building. Consider building access as well as the route to the entrance by foot, car, or transit.

Barrier:	• The building has steps leading up to the entrance; people with mobility challenges may not be able to enter the building.
Solution:	• Construct a ramp to enter the building. • Installing a ramp will allow individuals with a mobility impairment to access the building independently.
Who Benefits:	• Individuals who use a wheelchair or have a mobility impairment. • Older adults, seniors, individuals with a temporary disability (i.e. crutches), or people using a stroller. • People of all abilities.
Improvement Ideas:	• Construct an accessible route that provides access to the main entrance and integrates aesthetically with the building architecture. • Convert old steep ramps into sloped walkways to encourage inclusion and integration. • Provide 2 handrails in contrasting colour. • Ensure there is a level landing at the top and bottom of all ramps. Note: Longer ramps may require additional landings

Appendix A Sample Barrier Buster Projects *Continued*

What Can Students Do?	• Contact the owner of the building to highlight why a ramp should be built. • Research the procedures and policy to construct a ramp.
Professionals To Consult	• Building owner • Property Manager • Architect/Engineer • Builders/General Contractors • Code consultant • Ramp specialist
Sample Costs	• $500-$20,000+
Additional Resources	• Cost to build accessible ramp

Appendix A Sample Barrier Buster Projects *Continued*

Power-operated Entrance and Interior Doors

Barrier:	• The door(s) is too narrow, heavy and/or hard to open.
Solution:	• Update door latches or install power operated doors throughout the building. • Decrease tension by utilizing door accessible adaptations, such as: offset hinges, replacing door hardware, installing a power operated door, etc. **Tip: Sometimes tension can be easily relieved by adjusting the door hinges. Make sure this is checked safely by the building/property manager.*
Who Benefits:	• Individuals with a mobility impairment. • Older adults, seniors, individuals with a temporary disability (i.e. crutches), or people using a stroller. • People of all abilities.
Improvement Ideas:	• Install power-operated doors on entrance door and other high traffic doorways. • Include emergency power, so the door can be an emergency exit door.

Appendix A Sample Barrier Buster Projects *Continued*

What Can Students Do?	Contact building owner to highlight the importance of accessibility features such as: • Adding power operated doors. • Installing offset hinges. • Removing/replacing threshold. • Replacing with existing hardware accessible hardware (i.e. replace existing door closers with delayed action-low resistance closers). Research costs and suppliers to make improvements.
Professionals To Consult	• Licensed contractor
Sample Costs	• Approx. $1,800- $2,400 for power door • Approx. $20-$40 per offset hinge • Average cost per threshold: $70-$90 • Average cost for accessible hardware: $20-$200+ per lever
Additional Resources	• Adaptive Access Offset Hinges • Cost of transition strips

Appendix A Sample Barrier Buster Projects *Continued*

Elevator Or Lift

Make sure individuals are able to access all rooms and floors in a building freely and easily.

Barrier:	• The building has several floors but only steps connecting them, individuals with mobility impairment cannot access the upper levels.
Solution:	• Install an elevator or platform lift. • Installing an elevator or a platform lift will allow individuals with a mobility or vision impairment to navigate the building safely.
Who Benefits:	• Individuals who use a wheelchair or have a mobility impairment. • Older adults, seniors, individuals with a temporary disability (i.e. crutches), or people using a stroller. • People of all abilities.
Improvement Ideas:	• Install an elevator and provide for any structural retrofit of the building that is necessary. • Install a platform lift and provide for any structural retrofit of the building that is necessary.
What Can Students Do?	• Contact the owner of the building to highlight why an elevator or lift should be installed.
Professionals To Consult	• Building owner • Property Manager • Architect/Engineer • Builder/General Contractor • Code Consultant • Elevator/lift company
Sample Costs	• Approx. $20,000-$70,000+ for elevator/lift plus labour and design (depending upon the level of finish).
Additional Resources	• Elevator or Lift Installation


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Appendix A Sample Barrier Buster Projects *Continued*

Accessible Washrooms And Showers

Lower or automate various washroom amenities to ensure they are accessible for individuals of all ages and abilities.

Barrier:	• The washrooms are not accessible/safe for an individual with a disability.
Solution:	• Install accessible washroom amenities. • Amenities (e.g. hand dryers) may need to be lowered to accommodate for individuals using a wheelchair or for height differences. • Installing under-sink plumbing protective covering will reduce likelihood of burns and scrapes, especially for individuals using a wheelchair. • Installing automatic paper towel dispenser/hand dryer, faucet, power door, etc. will increase independence for individuals with a mobility impairment.
Who Benefits:	• Individuals of all abilities and height. • Individuals with a mobility impairment. • Older adults, seniors, individuals with a temporary disability (i.e. crutches), or people using a stroller.
Improvement Ideas:	• Construct an accessible washroom or stall. • Construct an accessible shower. • Provide an adjustable height adult change table. • Develop a 'no-touch' washroom. Power doors, faucets and paper towel dispensers are easier for everyone and can reduce the infection rate by as much as 80%.
What can students do?	• Contact the owner of the building to highlight the importance of having washrooms that are accessible to all. • Research accessibility guidelines and local code. • Research costs of adjusting amenities, installing protective covering, and other universal design considerations.
Professionals To Consult	• Building owner • Property Manager • Code Consultants • Building professionals

Appendix A Sample Barrier Buster Projects *Continued*

Sample Costs	• Average Grab Bar Cost: $95- $200+ • Automatic Faucets: Average total cost per sink/faucet: $290-$1,000+ • Average total cost for Under Sink Piping Protectors (each) $11-$60+ • Average total cost per automatic flushing toilet: $350-$1,000+ • Average total cost per accessible toilet paper dispenser: $80-$130+ • Average total cost per accessible door lock: $75 -$150+ • Average total cost per accessible door latches: $13 + • Average total cost per accessible door pulls: $35 + • Average total cost per automatic soap dispenser: $20-$100+ • Average total cost per automatic hand dryers: $900+
Additional Resources	• Bradley Corp ADA Washroom Standards • Cost to install grab bar • Cost of automated sinks and toilets: Quora, Home Advisor • ADA compliant door handles

Appendix A Sample Barrier Buster Projects *Continued*

Emergency Response

Visual and audio emergency warning systems are critical to ensure the safety of all individuals. Consider how an individual with a disability can quickly and easily exit a building to a safe gathering place.

Barrier:	• Emergency alarms provide no warning for individuals who are D/deaf or hard of hearing. • Announcements are made only via PA system and may not be heard by people who are D/deaf or hard of hearing.
Solution:	• Install a visual alarm system (strobes) and/or notice boards for announcements. • Ensure that emergency systems (i.e. fire alarms) can safely alert individuals who are D/deaf or hard of hearing. • Ensure that announcements are communicated using sound and images e.g. PA system and visual displays
Who Benefits:	• Individuals with a hearing impairment. • Older adults and seniors. • Other disability groups (i.e. individuals with cognitive/mental health, individuals with autism, etc.). • People of all abilities.
Improvement Ideas:	• Add visual fire/emergency alarms throughout the building. • Install an emergency evacuation chair in all the emergency exit areas. • Post evacuation emergency instructions with diagrams and clear text at accessible height. • Install emergency equipment, fire pulls, extinguishers, etc. at accessible operating height (approximately 1200mm above finished floor).
What can students do?	• Contact the building owner and highlight the importance of accessible alarm and announcement systems. • Research visual alarm systems (strobes). • Draft and propose an accessibility plan in the school emergency procedure manual. • Install a notice board and ensure all announcements made over the PA system are displayed visually.

Appendix A Sample Barrier Buster Projects *Continued*

Professionals To Consult	• Property Manager • Code Consultant
Sample Costs	• Average cost for visual alarm system (strobes)=$45-160 +
Additional Resources	• Fire Alarm Systems • Strobe Alarm Application Guide • Visual Audio Alarm

Appendix A Sample Barrier Buster Projects *Continued*

Additional Accessibility Solution Ideas

Here are some additional solution ideas eligible for Barrier Buster grant funding:

Buildings

- Counters at different heights
- Variety of seating and tables with rounded corners
- Lowered/or variable height sinks with roll-under space
- Construct a drop-off/pick-up zone with appropriate markings and level, flat, no slip surface
- Add shelter to outside areas to protect from weather
- Add seating for people to rest while waiting

Activities

- Develop accessible pathways
- Make amenities such as docks, beaches, snow parts more accessible using roll-out pathways
- Accessible picnic tables
- Tactile landscaping
- Wayfinding using tactile or audio landmarks – water features, sculptures, sound, etc.
- Aromatic gardens with braille/raised lettering signage

Equipment

- Adjustable chairs – mixture with and without arms - desks that are adjustable
- Screen reader software on PCs
- Induction loops in educational and cultural facilities
- Information/materials made available in alternative formats

Appendix A Sample Barrier Buster Projects *Continued*

While the following smaller accessibility solutions are not eligible for a Barrier Buster grant, they are still important steps to improving accessibility in your school and students may be able to raise the smaller sums required to complete them.

Buildings

- Signs indicating location of the nearest accessible entrance
- Visible main entrance (e.g. a brightly painted door)
- Clear pathways
- Objects hanging/mounted high enough to be avoided by people who have a vision disability
- Good lighting
- Decorations and amenities (such as plants and water fountain) located at different levels so that everyone can touch and smell

Activities

- Academic accommodations: larger print, close and live captioning, electronic scribes/readers
- Service animals allowed signs
- Identify ways sports can be made accessible

Equipment

- Larger screens
- Reachers for high library shelves
- FM / Audio system throughout classroom / school
- Braille printer/keyboard/books
- Personal technology devices to assist students (e.g. laptop)
- Text recognition software/speaker
- Voice recognition software
- Water/texture/auditory activities
- Magnifiers
- Telephones with volume control, big buttons
- Labels using pictures instead of words
- Motion sensors (e.g. trashcan, door)

Appendix A Sample Barrier Buster Projects *Continued*

Glossary

Accessible Hardware is typically a lever that is easy to grasp, and does not require tight grasping, tight pinching, or twisting of the wrist to operate. Door knobs are not accessible, as a person with limited hand dexterity is not able to operate.

Braille is a tactile writing system used by people who are blind or visually impaired. It is traditionally written with embossed paper.

A **Curb Cut** is a ramp graded down from the top surface of a sidewalk to the surface of an adjoining street.

Delayed Action-Low Resistance Closer is a mechanical device that closes a door after someone opens it, or after it was automatically opened. This relieves some of the weight, making it easier to pull open for a person with a mobility impairment.

Fire Alarm Pull Stations are active fire protection devices, usually wall-mounted, that, when activated, initiates an alarm on a fire alarm system.

Offset Hinges are hinges that allow doors to swing completed free of the mounting frame, providing maximum clearance through the doorway, allowing for enough space for a person using a wheelchair.

A **Platform Lift**, also known as a vertical is a platform lift a fully powered device designed to raise a wheelchair and its occupant in order to overcome a step or similar vertical barrier.

A **Power Operated Door** opens at the approach of a person or vehicle and closes when the person or vehicle has passed.

Raised Lettering is printing in which the letters or image are raised above the surface, so that an individual with a vision impairment can read a sign by feeling the shape of the letters.

Tactile Markings are textured indicators that provide a distinctive surface pattern. This allows a person with a visual impairment to guide through an environment. Tactile markings should have a strong color contrast with surrounding materials, as studies have shown that this aids individuals who are partially sighted.

A door threshold is the point or level at which something begins or changes. Typically, this is a piece of wood, metal, or stone that forms the **bottom** of a door and that one walks over as they enter a room or building.

Under sink plumbing protective covering protects wheelchair users from hot water plumbing burns or scrapes.

Visual alarm systems, or **strobe alarms**, provide individuals with hearing loss a visual cue for emergency.

Wayfinding can be defined as spatial problem solving. It is knowing where you are in a building or an environment, knowing where your desired location is, and knowing how to get there from your present location.

Appendix B

Appendix B Activity Instructions

Activity 1: Exploring through KWL

1. Students fill in the first column of the KWL chart to identify what they know about accessibility for people with vision, hearing and mobility disabilities in their school and community, using point form notes. Give students five minutes to record their answers.

Ask students to share what they have written and summarize on chart paper. Acknowledge students' understanding and address any myths or misconceptions about disability that they might have

2. Students fill in the second column with questions or what they would like to know about disabilities and accessibility. Give students five minutes to record their questions.

Ask students to share what they have written and summarize on chart paper. Ask students if they have some knowledge or understanding of the topics raised through the questions. Fill in information that can be addressed immediately.

3. Students fill in the final column with things that they learned from the discussions so far. Give students five minutes to fill in their chart.

Ask students to share what they have written. Discuss important points with students.

KWL chart:

What I know about accessibility for people with vision, hearing and mobility disabilities:	What I would like to know:	After our discussion I learned that:

Appendix B Activity Instructions *Continued*

Activity 2: Scenario Analysis

Opening Motivator
10 minutes

Students write the name of their school as many times as possible in one minute using their dominant hand.

Students then repeat the exercise using their non-dominant hand.

Discussion Questions

- How did writing with your non-dominant hand make you feel?
- What do you think it would be like to write with your non-dominant hand on a regular basis?
- Is there something that could help you do this more efficiently?
- How can you relate this experience to the experience of people with disabilities?

People with disabilities can find certain tasks more challenging. Many of these challenges can be reduced by using innovative solutions, for example speech to text software.

Main Activity
40 minutes

A person who has a disability may experience stereotyping by those who do not know or understand his or her disabilities. A number of myths circulate widely in our society and interfere with understanding of people with disabilities.

Test Your Knowledge: Students respond to true and false statements by walking toward a poster with the word 'true' placed at one end of the class, or toward a poster at the other end of the class with the word 'false'.

1. **Statement**: All people who are Deaf can read lips. (False)

   Fact: Some people who are Deaf are very skilled lip readers, but most are not. Only 30% of spoken English is visible on the lips. This is because many speech sounds have identical mouth movements. For example: p and b look exactly alike on the lips.

2. **Statement**: People who are Deaf can appreciate the arts even though they can't hear music, movies, etc. (True)

   Fact: Deaf theater and sign language films are an intricate part of the Deaf community. Interpreters and advanced technology can provide access to the performing arts. Many television shows and movies are closed captioned.

3. **Statement**: People who are blind or partially sighted are automatically endowed with other highly developed senses and skills. (False)

   Fact: This is not so. Loss of eyesight means learning to do familiar tasks differently and learning to use other senses – this isn't automatic.

4. **Statement**: Students who are blind or partially sighted shouldn't participate in physical activities for fear of losing their remaining sight or because they can't see what they are doing to participate. (False)

   Fact: Physical education and recreational activities improve motor skills, coordination, and perceptual skills as well as mental and physical health, and should be encouraged for everyone. Most physical activity can be easily adapted to allow an individual who has a vision impairment to participate.

5. **Statement**: Wheelchair use is confining; people who use wheelchairs are "wheelchair-bound." (False)

   Fact: A wheelchair, like a bicycle or an automobile, is a device that enables someone to get around.

6. **Statement**: Within 20 years it is expected that one in five Canadians will have a disability.[1] (True)

7. **Statement**: Adults with disabilities overall earn less than adults without disabilities. (True)

   Fact: In general, adults with disabilities have a lower median household after-tax income than adults without disabilities - $8,853 less for women and $9,557 for men.[2]

Appendix B Activity Instructions *Continued*

8. **Statement**: Many modern inventions that were developed for people with disabilities are now mainstream devices. (True)

Fact: Modern texting developed from TTY technology that allowed people with hearing impairments to talk to their friends on the telephone.

Closed captioned technology intended for those with hearing disabilities is now mainly used by those without hearing disabilities.

Voice command developed from Apple's desire to make computers more accessible to people with disabilities. This has led to voice commands we use today on our smartphones and vehicles.

9. **Statement**: Students with physical disabilities complete post-secondary education at the same rate as those without disabilities. (False)

Fact: In Canada, proportionately, nearly 50% fewer adults with disabilities get Bachelor's and Graduate degrees compared to adults without disabilities. 16.3% of adults with disabilities get these degrees compared to 28.3 % of adults without disabilities.[3]

10. **Statement**: Worldwide the number of people who have a disability is equal to the population of China. (True)

Fact: 1.1 billion people globally report having a disability. Two billion additional people are friends and family of people with disabilities - together that's half the world population. Together, they control over $8 trillion in annual disposable income globally, so making spaces and services accessible is not only the right thing to do, it also makes commercial sense.

Discuss the answers and the following definitions.

- **Vision disability or being blind:** You have trouble seeing, you might use a sensing cane, a seeing-eye dog, or very strong prescription eye glasses.
- **Hearing disability or being Deaf:** You have trouble hearing, you might use sign language to communicate or a hearing aid device.
- **Physical disability:** You do not have the use of your whole body, such as arms and legs. You might use a wheelchair, leg braces or an artificial limb (prosthetic limb).

In groups students discuss how having a vision, hearing or physical disability would affect their experiences in a number of everyday situations. Each group selects one situation from the Scenario Analysis handout, completes the relevant section of the handout in their group then shares their findings with the whole class.

Students brainstorm ways they could overcome the barrier identified in the first column and improve the overall experience or situation for people with disabilities.

Conclusion

10 minutes

Students view the picture on page 23 of Create Your Own Challenge of Project to discuss the difference between equality and equity, and relate this to the previous scenarios. Considered how equality (everyone gets the same) is not the same as equity (everyone gets what they need).

[1] Martin Prosperity Institute, Releasing Constraints: Projecting the Economic Impacts of Improved Accessibility in Ontario, June 2010, www.mcss.gov.on.ca/documents/en/mcss/accessibility/Ont_InfoGraph-EN.pdf

[2] Survey of Labour Income Dynamics, Statistics Canada, 2009, and Report on Equality Rights of People with Disabilities, Canadian Human Rights Commission, 2012, www.chrc-ccdp.ca/sites/default/files/rerpd_rdepad-eng.pdf

[3] Survey of Labour Income Dynamics, Statistics Canada, 2009, and Report on Equality Rights of People with Disabilities, Canadian Human Rights Commission, 2012, www.chrc-ccdp.ca/sites/default/files/rerpd_rdepad-eng.pdf

Appendix B Activity Instructions *Continued*

Situation	Barriers or Challenges	How would I feel and/or what would be my overall experience?
Going to the store	Vision:	
	Hearing:	
	Physical:	
Doing banking	Vision:	
	Hearing:	
	Physical:	
Applying for a job	Vision:	
	Hearing:	
	Physical:	

Appendix B Activity Instructions *Continued*

Situation	Barriers or Challenges	How would I feel and/or what would be my overall experience?
Going to high school for the first time	Vision:	
	Hearing:	
	Physical:	
Taking part in a club at school	Vision:	
	Hearing:	
	Physical:	
Participating in a class trip	Vision:	
	Hearing:	
	Physical:	

Appendix B Activity Instructions *Continued*

Situation	Barriers or Challenges	How would I feel and/or what would be my overall experience?
Shopping for clothes	Vision:	
	Hearing:	
	Physical:	
Going to a restaurant	Vision:	
	Hearing:	
	Physical:	

Appendix B Activity Instructions *Continued*

1. Vision disability or being blind
   You have trouble seeing, you might use a sensing cane, a seeing-eye dog, or very strong prescription eye glasses.

2. Hearing disability or being Deaf
   You have trouble hearing, you might use sign language to communicate or a hearing aid device.

3. Physical disability
   You do not have the use of your whole body, such as arms and legs. You might use a wheelchair, leg braces or an artificial limb (prosthetic limb).

4. Barrier
   An obstacle that prevents someone from doing something. Barriers may be physical (e.g. buildings with stairs) or social (e.g. people's attitudes).

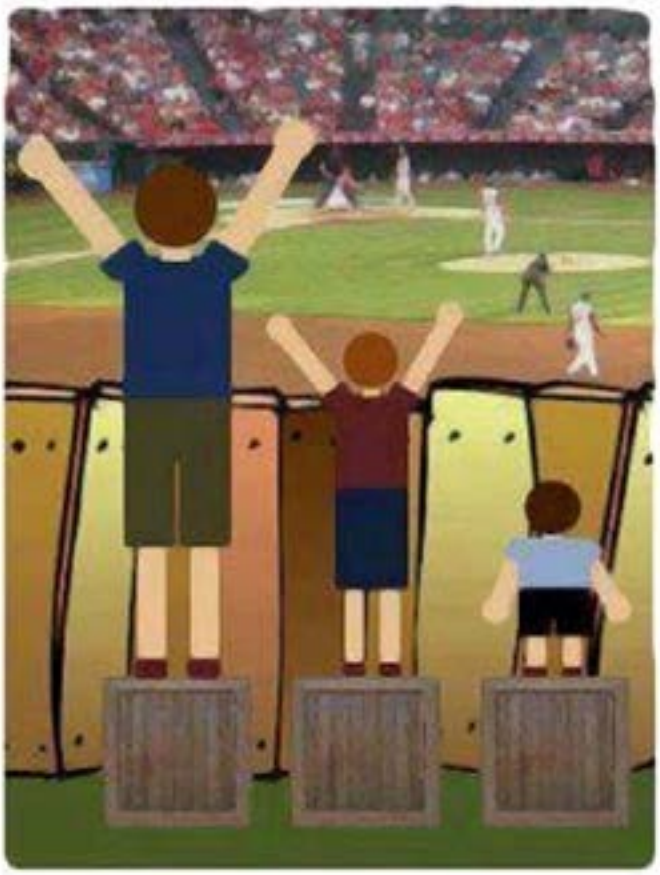
5. Accessibility
   The degree to which a product, device, activity, facility, service or environment allows everyone to participate fully and is available to everyone on an equal basis.

6. Inclusion
   The practice of ensuring everyone has the opportunity to participate in an activity, while respecting differences.

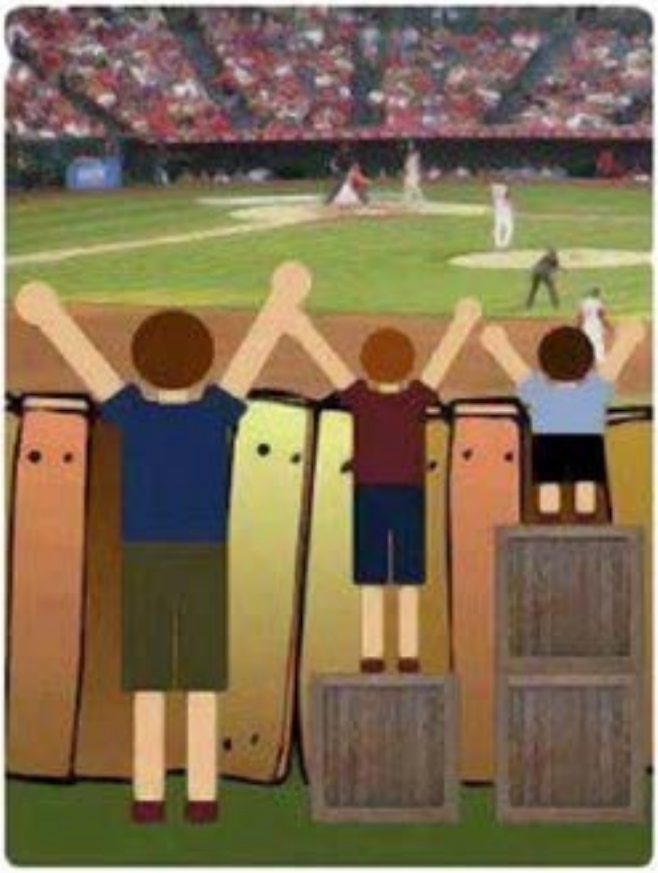
7. Equality
   The treatment of people as the same, with no special attention to historical or current disparity amongst groups, in order to exercise fairness in how individuals are supported and protected.

8. Equity
   The treatment and support of people according to their needs, in order to exercise qualitative fairness, by ensuring that everyone has access to the same quality of life and is equipped with the tools they uniquely need in order to achieve personal success.

Appendix B Activity Instructions *Continued*



EQUALITY



EQUITY

Appendix B Activity Instructions *Continued*

Activity 3: Accessibility Checklist

Use this simple checklist to help identify barriers in a public place within your community such as a school, community centre, library, park, church or theatre.

Check the yes or no answer for each question and tally your yes scores at the bottom – the higher the score the more accessible the space. Have fun!

	Yes	No
Accessible Play Spaces		
1. Can the playground be reached using a smooth surface?	◯	◯
2. Does the playground have equipment that allows for children of all abilities to play together? e.g. an accessible swing, ramps, rough or raised surfaces and sound.	◯	◯
Parking & Exterior Access		
1. Is there at least one clearly marked parking space close to the front entrance reserved for people with disabilities?	◯	◯
2. Is there a drop-off/pick-up zone with appropriate markings and level, flat, no-slip surface?	◯	◯
3. Can the building/space be reached using a ramp rather than stairs?	◯	◯
Interior Accessibility & Workspaces		
1. Can doors be opened by pushing a button?	◯	◯
2. Does the space have adjustable desks and a mix of chairs (with and without arms)?	◯	◯
3. Are signs on the inside and outside of each room easy to read, with large font or Braille?	◯	◯
Elevator or Lift		
1. If the building has more than one floor, is there an elevator or lift that brings you to the exact floor of a room's entryway?	◯	◯
2. Does the elevator include Braille signage and audio floor announcements?	◯	◯
Accessible Washrooms		
1. Is at least one stall in each washroom reserved for people who use a wheelchair?	◯	◯
2. Are there grab rails inside the reserved stall?	◯	◯
3. Are there automated, no-touch faucets, hand dryers, and paper towel dispensers?	◯	◯

Appendix B Activity Instructions *Continued*

Accessible Kitchens, Cafeteria & Eating Spaces

1. Is there a variety of seating options (including chairs that can be moved to accommodate wheelchairs) and tables with rounded corners? ◯ ◯
2. Are there lowered or variable height sinks and counters? ◯ ◯

Emergency Response

1. Is there an emergency evacuation chair (a chair that can go down stairs) in all emergency exit areas above the ground floor? ◯ ◯
2. Do stairs have colourful markings with grooves or rough textures so you can feel where each stair ends? ◯ ◯
3. Do fire alarms use visual flashing lights in addition to loud noises? ◯ ◯

Parks, Trails and Marine Access

1. Are there roll-out pathways to provide access to trails, docks and beaches? ◯ ◯
2. Are there landmarks that you can touch and hear, such as water features and sculptures, or signs that are available in Braille? ◯ ◯

Appendix B Activity Instructions *Continued*

Activity 4: Project Planning

Students consider what resources they need to implement their project. These may include:

- Information or advice,
- Tools and materials,
- Community partners,
- Money.

Students identify tasks, allocate each task to one or more members of their group, and specify deadlines.

Ask students to use the Group Project Planning Sheet and Group Tracking Sheet to record their plans.

Appendix B Activity Instructions *Continued*

Group Project Planning Sheet

Our group goal is to:

_____

_____

Steps we need to take to reach our goal:

- _____
- _____
- _____

What information or advice do we need?

- _____
- _____
- _____

What tools and materials do we need?

- _____
- _____
- _____

Who can help us?

_____

_____

We will try to reach our goal by this date:

_____

_____

Appendix B Activity Instructions *Continued*

Group Project Tracking Sheet

Group Project: _____

Group Members: _____

_____

Task	Group Member(S) Assigned to Task	Date Task to Be Completed	Task done?

Appendix B Activity Instructions *Continued*

Example Group Project Planning Sheet

Our group goal is to:

There are not many signs around our school to help people find their way around. The signs we have are small and could not be read by someone with a visual disability.

Steps we need to take to reach our goal:

- Survey our school and identitfy any signs we think are too small
- Decide what signs we need to make and if they will include braille
- Research how big the signs should be and where they should be located

What information or advice do we need?

- Get advice from teachers and the principal
- Where do we find materials? What will they cost if we need to buy?
- Who will help us to make and print them?

What tools and materials do we need?

- Paper, pens, laminating sheets, etc.
- School map
-

Who can help us?

Mrs. Patterson (our teacher), Principal, Parent Council

We will try to reach our goal by this date:

April 30, 20XX

Appendix B Activity Instructions *Continued*

Example Group Project Tracking Sheet

Group Project: Signage

Group Members: Ethan, Mia, Connor, Leah, Noah, Vicky, William, Ruby and Mrs. Patterson (Team Awesome)

Task	Group Member(S) Assigned to Task	Date Task to Be Completed	Task done?
Talk with principal and teacher to explain our project	Ethan, Mia and Connor	April 1, 20XX	
Talk with parent council to explain our project	William and Ruby	April 1, 20XX	
Get school map and decide what signs we need and where they should be placed	Team Awesome	April 7, 20XX	
Research signs and sizes	Leah, Noah and Vicky	April 7, 20XX	
Meeting to discuss progress	Team awesome	April 9, 20XX	
Obtain materials	Mrs. Patterson, Parent Council	April 9, 20XX	
Create signs	Team Awesome	April 10-17, 20XX	
Have signs laminated	Mrs. Patterson	April 20, 20XX	
Place signs around school	Team Awesome	April 20, 20XX	

Appendix B Activity Instructions *Continued*

Example Group Project Planning Sheet

Our group goal is to:

Raise funds to help pay for a ramp for the school entrance, by running a car wash on Saturday.

Steps we need to take to reach our goal:

- Explain our project to the principal and parent council
- Obtain any permissions required
- Research what we need for a car wash
- Obtain materials for the car wash
- Advertise our project

What information or advice do we need?

- What are the best materials to use?
- Safety concerns and parent supervision
- Where can we advertise?
- What is a reasonable cost so we make money?

What tools and materials do we need?

- Hoses, water supply, buckets, wash materials
-
-

Who can help us?

Teachers, principal and parent council

We will try to reach our goal by this date:

June 15, 20XX

Appendix B Activity Instructions *Continued*

Example Group Project Tracking Sheet

Group Project: Car wash to raise funds for a ramp

Group Members: Ethan, Mia, Connor, Leah, Noah, Vicky, William, Ruby and Mrs. Patterson (Team Awesome)

Task	Group Member(S) Assigned to Task	Date Task to Be Completed	Task done?
Approach principal to explain project and seek advice	Ethan, Mia and Connor	May 1, 20XX	
Approach parent council to explain project and seek support	William and Ruby	May 1, 20XX	
Research the best place for the car wash, placement of hoses, water supply	Leah, Noah, Vicky	May 15, 20XX	
Permission forms	Mrs. Patterson	May 20, 20XX	
Meet to share information and discuss best way to advertise (local news, announcements, school newsletter)	Team Awesome	May 20, 20XX	
Obtain materials with support from school and parent council	Mrs. Patterson, Parent Council	May 30, 20XX	
Meet with principal to summarize progress	Ethan, Mia and Connor	Jun 1, 20XX	
Advertising, signs	Leah, Noah, Vicky	Jun 2-14, 20XX	
Set up the night before	Team Awesome	June 14, 20XX	
Car Wash:	Team Awesome	June 15, 20XX	

Appendix B Activity Instructions *Continued*

Activity 5: Reflection Journal

Name: _____ Date: _____

Group Members: _____

I shared ideas about how to complete our project.	( ) 3 Always ( ) 2 Sometimes ( ) 1 Rarely
I listened to the ideas of others.	( ) 3 Always ( ) 2 Sometimes ( ) 1 Rarely
I asked for help or asked question when I did not understand something.	( ) 3 Always ( ) 2 Sometimes ( ) 1 Rarely
I helped other people in the group.	( ) 3 Always ( ) 2 Sometimes ( ) 1 Rarely

One thing I have learned about accessibility is: _____

_____

Accessibility is important because: _____

_____

One question I have about accessibility: _____

_____

In my group I am good at: _____

_____

I will try to be better at: _____

_____

Appendix B Activity Instructions *Continued*

Activity Six: Final Assessment and Reflection

Name: _____ Date: _____

Group Members: _____

We shared ideas about how to complete our project.	( ) 3 Always ( ) 2 Sometimes ( ) 1 Rarely
We listened to the ideas of others.	( ) 3 Always ( ) 2 Sometimes ( ) 1 Rarely
We performed our roles/jobs in our group.	( ) 3 Always ( ) 2 Sometimes ( ) 1 Rarely
I helped other people in the group.	( ) 3 Always ( ) 2 Sometimes ( ) 1 Rarely
We completed the project on time.	Yes / No

One thing I have learned about accessibility is: _____

_____

Accessibility is important because: _____

_____

One question I have about accessibility: _____

_____

Our group was good at: _____

_____

We could have improved by: _____

_____

We are proud of our project because: _____

_____

Appendix B Activity Instructions *Continued*

As an alternative to reflective journals, consider using Talking Circles.

Talking Circles are foundational in First Nations practice. They provide a model for an activity that encourages dialogue and respect by giving everyone the opportunity to contribute equally.

Have students sit in a circle and explain that everyone will have a chance to participate in the discussion. One person will talk at a time, as we all listen. Use a talking stick (or an everyday object). The person who holds the stick is the speaker. Use the reflective questions (Appendix B, Activity 5 and 6) as the basis for the Talking Circle.

- Explain that the circle symbolizes that everyone's contribution is equally important.
- Use 'I' statements.
- All comments address the reflective question, but comments about what anyone else has to say is not part of the Talking Circles.
- When the talking stick is placed in someone's hands, it is that person's turn to share his thoughts. Others have the responsibility to listen.
- Students may "pass".

The circle suggests inclusiveness and provides a sense of community and belonging. It will provide an alternative reflection option to address the needs of students with varying learning styles.

Appendix C

Appendix C Personal Stories of People with Disabilities

Case Study: Rick Hansen

Ever since his spinal cord injury at the age of 15, Rick Hansen has advocated both for himself and for others with disabilities. He showed what was possible by graduating from high school and going on to become the first person with a disability to earn a degree in Physical Education from the University of British Columbia, overcoming physical and attitudinal barriers along the way. At the age of 27 Rick went on to raise awareness on a global scale by wheeling around the world in his wheelchair as part of the Man In Motion World Tour to show the potential of people with disabilities. On his return he set up the Rick Hansen Foundation, which continues that work to this day. Rick also continues to raise awareness for the rights of people with disabilities through public speaking and his work with government, businesses and not-for-profits.

Appendix C Personal Stories of People with Disabilities *Continued*

Case Study: Luke Anderson

A passionate athlete and a university of Waterloo graduate, Luke Anderson started using a wheelchair after he missed a 25-foot jump while mountain biking in the interior of BC and sustained a spinal cord injury. As Luke puts it: "In a split second I left my life as I knew it and I got introduced to a world that was not well suited for wheelchairs."

Luke worked at an engineering firm in downtown Toronto. The office building had 3 steps at the entrance but no ramp, so Luke had to rely on his friend and co-worker Michael to come downstairs and deploy a temporary folding access ramp for Luke to get in and out of work every day. Luke was also unable to enter certain businesses because there were no ramps. Luke's frustration with these physical barriers inspired him create the StopGap Foundation to transform the state of accessibility across Toronto.

StopGap provides free access ramps to businesses through the Community Ramp Project, to raise awareness about the issue of inclusivity and to create accessible communities for everyone. The ramps are painted with bright colours to attract attention and to start a conversation around inclusivity and accessibility. At first glance it might seem like the ramps are designed only for people who use wheelchairs but the benefits extend to delivery people, the elderly, and people with strollers.

Since its birth, StopGap has successfully provided over 200 ramps to businesses all over the city. The project continues to grow with initiatives starting in Vernon and Prince Rupert BC, Stratford, Guelph, Markham and Belleville, ON, and aims to reach communities and provinces all across Canada.

A simply designed inclined plane and determination has created inclusive and accessible communities that benefit everyone.

Read more about Luke Anderson and StopGap at stopgap.ca.

Appendix C Personal Stories of People with Disabilities *Continued*

Case Study: Dr. Jeff Preston

Born in Port Elgin, Ontario, Jeff Preston was diagnosed with Congenital Muscular Dystrophy at the age of 3 months. He now uses an electric wheelchair. Throughout his life Jeff has advocated for the needs of himself and others with disabilities hoping to live an independent and barrier-free life. Jeff is a professor at King's College, University of Western Ontario specializing in studies on the portrayal of people with disabilities in the media.

Jeff is also the founder of Mobilize!! (getmobilized.ca). Mobilize!! was a website, with roots in the blogging community, that allowed both able-bodied and disabled activists to learn about issues facing the disabled community through articles and essays. The site also gave activists the opportunity to discuss these issues with the hope of developing strategies to rectify these problems.

Mobilize!! evolved into Jeff's personal disability rights blog (www.jeffpreston.ca), where he writes about issues facing the local disability community. He has used the site as a platform to launch several advocacy initiatives.

One of these was the Mobilize March, Jeff's journey from London, Ontario to Ottawa in his electric wheelchair. While waiting for an accessible cab ride one day, Jeff and his friends joked about how an individual with a physical disability would make a long trip, say to the nation's capital, when crossing the city of London was proving nearly impossible. So Jeff decided to make the trek to Ottawa in his chair, planning the route to stop and talk with local and provincial politicians about accessibility and inclusion, and to recharge his battery! His daily blog posts chronicled the journey.

Jeff continues to blog to raise awareness about accessibility and equity rights for people with disabilities.

Read more about Jeff at www.jeffpreston.ca

Credit: youtu.be/D8AEqftMt40

Appendix C Personal Stories of People with Disabilities *Continued*

Case Study: Dustin Paul

Almost ten years after a motorcycle accident, Dustin Paul became the first quadriplegic hired to article at Bull, Housser & Tupper, one of Canada's top legal firms.

Paul initially took criminology at Langara College. "I soon discovered that most postsecondary institutions in BC have a disability resource centre, and I immediately began to work with Langara's to find answers to my questions. To my surprise, the centre had all the bases covered – from note-taking and scheduling, to in-class accommodations and even attendant care. I found out that that a fellow student could be hired as a note-taker, that I qualified for extended time on exams, and that I could write them in a private room using voice recognition software. I discovered that I qualified as a full-time student at a reduced course load, and that there were funds available to help pay for attendant care services and assistive technology," says Paul in an interview for The Spin, Spinal Cord Injury BC's magazine.

Paul went on to study at Simon Fraser University and then the University of British Columbia, before joining Bull, Housser & Tupper for his articles.

"I've now been exposed to the legal industry in some form or another for about four years. I've been thrilled with how receptive it has been, both in academic and professional settings…My colleagues have been proactive at every stage about addressing my needs and giving me the resources I need to be successful. They've accommodated my needs by providing simple things like special cutlery in the lunch rooms, to adjusting the height of my desk, to ensuring I have an ergonomic workspace, and even by installing automatic doors. No request has been off-limits for discussion. But most importantly, I've simply felt like just another member of the team," says Paul.

Read more about Dustin Paul on the University of British Columbia website: tinyurl.com/pgcdn4k

Dustin Paul on the cover of Spinal Cord Injury BC's magazine.

Appendix C Personal Stories of People with Disabilities *Continued*

Case Study: Brian McKeever

Brian McKeever started skiing at the age of three. At 19 he was diagnosed with Stargardt disease (a macular degeneration or loss of central vision). "If you stare at the sun for a long time and turn away, you get these fuzzy spots. Well for me, the fuzzy spots don't go away," says McKeever describing his vision.

McKeever was the first Canadian athlete with a disability to ski in an able-bodied international event in 2007, and made history in 2010 when he became the first athlete to be named to the Canadian Olympic and Paralympic Winter Games teams.

At the Sochi Paralympic Games in 2014 he collected gold medals in the men's visually impaired 20 kilometre, 10 kilometre and one kilometre sprint with his guides Erik Carleton and Graham Nishikawa. His victory in the one kilometre was particularly memorable as he overcame a fall at the start and overtook the leader on the final bend to win.

Overall, McKeever has earned 13 Paralympic medals in three Games, including 10 gold, the most victories ever by a Canadian winter Paralympian. He has competed at every world championship since 2005 and has won nine titles, in addition to 21 World Cup wins.

Although he'll be 38 by the time of the Paralympics in South Korea, McKeever hasn't ruled out competing. "We're going to leave the door open … We're still having fun, we've never been to Korea, so we'll take it one day at a time," he told CBC in a recent interview.

Read more about Brian McKeever on the website of the Canadian Paralympic Committee:
www.paralympic.ca/brian-mckeever

Credit: www.paralympic.ca/brian-mckeever

Appendix C Personal Stories of People with Disabilities *Continued*

Case Study: Jessica Kruger

Before her accident, Jessica was an active 14-year-old girl. She played basketball, softball and was cheer leader. She always dreamed of a profession where she could help people or animals—a veterinarian or a psychologist. Jessica was working for a small painting company and found herself two stories up on a ladder when she fainted and fell to the ground, becoming a quadriplegic. In rehab, she dealt with the frustrations of living in a wheelchair, but soon realised that people in wheelchairs could do all the same things as someone able-bodied, just in a different way.

There are only 10 women in Canada that play wheelchair rugby, aka Murderball at an international level. This fiercely competitive, contact sport was created by and for quadriplegics. Jessica is one of those 10 exceptional Canadian women.

Jessica was also recently chosen as the model for Lise Watier's perfume "Something Sweet" and her modelling career has taken off from there. Jessica's love for Betsy Johnson dresses and great shoes are indicative of a girlie side she has always had. She also enjoys baking, decorating and trying new recipes. There is always something delicious on the kitchen counter and she doesn't shy from whipping up a batch of her family's favourite carrot cake cupcakes at short notice.

Jessica believes that people should be well rounded and pursue as many things that interest them as possible. She firmly dedicates herself to the goals and dreams that drive her forward.

Read more and watch a video about Jessica Kruger on the website of the Rick Hansen Foundation at www.rickhansen.com/JessicaKruger

Credit: Erin Wild Photography

Appendix C Personal Stories of People with Disabilities *Continued*

Case Study: Trent Seymour

In 2014, Trent Seymour was a promising pitcher and catcher when he helped his team win gold at the North American Indigenous Games. Then at the age of 16 he was paralyzed in a hunting accident. Trent spent weeks in the intensive care unit to recover from his injuries which damaged his spine and left him a paraplegic.

As Trent worked through his rehabilitation he wanted to focus on what he could do and get back to the things he loved, including baseball. Now that playing wasn't an option, he signed up for umpire training. Today, Trent is Canada's first fastball wheelchair umpire.

As Trent says, "You got to really focus on what you can do and get back involved in the things you love."

Appendix C Personal Stories of People with Disabilities *Continued*

Case Study: Richard Peter

Richard is a wheelchair athlete who is a proud member of the Cowichan Tribes of Vancouver Island and a veteran on the men's wheelchair basketball team. Peter was injured at the age of four but that did not stop him from trying many different sports. When he was introduced to wheelchair basketball at the age of 15 he was hooked. Peter credits his friends and family with helping through his formative years and helping him find his love for athletics.

Peter has received the National Aboriginal Award for athletic achievements after competing in five Paralympic games. Peter joined Team Canada in 1994 and won three Paralympic gold medals in 2000, 2004, and 2012 where he sunk two late free throws as Canada beat Australia 64-58 in the gold medal game. Peter is considered one of the very best wheelchair basketball players in the world. Today, he is the only Canadian selected to participate in the league's first NBA all-star basketball game.

Appendix C Personal Stories of People with Disabilities *Continued*

Ted Talks

The Accessible City: Raul Krauthausen at TEDxHamburg
https://www.youtube.com/watch?v=2R0dLKCsrv8
Raul discusses accessibility in cities, barriers to those with disabilities, and what people can do with a little creativity and ingenuity to make cities accessible to all.

Design with the blind in mind: Chris Downey
https://www.ted.com/talks/chris_downey_design_with_the_blind_in_mind?language=en
Chris Downey is an architect who is blind and discusses life in his beloved San Francisco, and how the thoughtful designs enhancing his life now might actually make everyone's life better.

Sue Austin: Deep sea diving ... in a wheelchair
https://www.ted.com/talks/sue_austin_deep_sea_diving_in_a_wheelchair?language=en
Sue Austin uses art to convey the spirit of wonder she feels wheeling through the world. The video includes thrilling 360-degree footage of an underwater wheelchair that lets her explore ocean beds, drifting through schools of fish, floating free.

Evelyn Glennie: Touch the Sound
http://www.ted.com/talks/evelyn_glennie_shows_how_to_listen?language=en
Percussionist and composer Dame Evelyn Glennie lost nearly all of her hearing by age 12. Rather than isolating her, it has given her a unique connection to her music.

Appendix D

Appendix D Interesting Facts about Disability

Did you know?

- Rick Hansen went around the world in his wheelchair to show everyone the possibilities of people with disabilities. It took him two years, two months and two days.
- The football huddle was invented by a team from Gallaudet University, which has many Deaf students, as a way of hiding sign language instructions from opposing teams.
- Long before the Paralympics, American gymnast George Eyser, who had a wooden leg, won six medals at the 1904 Summer Olympics.
- In 2006, 14.3% of Canadians had a disability[1]. That is one in seven Canadians.
- Around 10% of the world's population, or 650 million people, live with a disability[2]. They are the world's largest minority[3], and the only minority group any of us can become a member of at any time.
- Baseball hand signals used by umpires to signify balls, strikes, out and safe originate from Outfielder William Hoy's request to umpires that they use sign language because he was Deaf and could not hear the umpires' verbal calls.
- Marla Runyan is an American track and field athlete, road runner, and marathon runner who is legally blind but competes in able-bodied events. She is a three-time national champion in the women's 5,000 metres and won the 1,500 metre race at the 1999 Pan American Games. She was the first legally blind athlete to compete in the Olympics.
- The famous French painter Pierre-Auguste Renoir developed arthritis late in life and required a wheelchair to get around. In order to continue painting, Renoir employed assistants who would dip brushes in paint for him and strap the brushes to his hands. Renoir's later paintings are celebrated for their looser brushwork which was probably a result of his arthritis and this technique of painting!
- 90% of people with visual impairments can see the sunwhich makes them able to see 93 million miles away[4].
- Sudha Chandran was born in South India. Her right leg was amputated as a result of a road accident. She was given an artificial leg and became one of the most accomplished and acclaimed dancers in India. She performs all over the world and has received many awards. She appears often on Hindi television and in films.
- Christy Brown was a famous Irish writer who had cerebral palsy and was able to write or type only with the toes of one foot. He wrote several books that became bestsellers around the world. His autobiography My Left Foot was made into a very successful film.
- Jean-Dominique Bauby had a rare disorder called Locked-in syndrome – his mind was perfectly normal but his body was completely paralyzed and he could only move his left eyelid. Despite this, he wrote a book called The Diving Bell and the Butterfly by blinking when the correct letter was reached by a person slowly reading the alphabet over and over again.
- American Sign Language, which is the most widely spoken sign language in Canada, came from France. A Canadian who only speaks ASL will find it very hard to communicate with someone from England who only knows British Sign Language, but will have a good chance of communicating with someone using French Sign language – even if they don't speak French!

[1] www.statcan.gc.ca
[2] www.un.org/disabilities/convention/pdfs/factsheet.pdf
[3] As above
[4] https://www.mtholyoke.edu/org/adapt/funfacts.html

Appendix D Interesting Facts about Disability *Continued*

Help Change
DISABILITY STATISTICS

Rick Hansen Foundation

AROUND THE WORLD

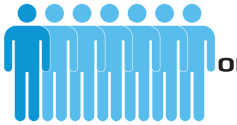
ONE BILLION

PEOPLE LIVE WITH SOME FORM OF DISABILITY

It is the world's biggest minority that anyone can become a part of at any time.

IN CANADA

ONE in SEVEN



or **4.4 MILLION**
Canadians have a disability.

Within about 20 years, that number is expected to grow to **ONE in FIVE.**

MORE THAN
3 MILLION
Canadian adults have a physical disability.

MORE THAN
2.6 MILLION
Canadian adults with disabilities need help with everyday activities.

MORE THAN
200,000
Canadian kids have a disability.

MORE THAN
EIGHT in TEN
Canadians with disabilities use aids or assistive devices.

Imagine not being able to participate fully in everyday life.

Since 1987, the Rick Hansen Foundation and our supporters have helped make hundreds of our communities more accessible to people with disabilities. It's good for our economy and our communities, but there's more to be done.

Join us in creating an inclusive society without barriers.

Source: To view references and sources for the information contained in this document, please visit the Rick Hansen Foundation website at www.rickhansen.com.

www.rickhansen.com

Appendix D Interesting Facts about Disability *Continued*

Help Change
DISABILITY STATISTICS

Rick Hansen Foundation

In Canada, it's expected the incomes of people with disabilities and an aging population will account for **40% of total income by 2030.** With such significant spending potential, there's a strong economic case for increasing accessibility and improving current disability stats.

The education gap

16.3% of adults with disabilities earn Bachelor's and Graduate degrees compared to **28.3% of adults without disabilities.**

The wage gap

Adults with disabilities have a lower median after-tax household income than adults without disabilities: **$9,557 lower for men** and **$8,853 lower for women.**

The underemployment gap

8.5% more men and **6.5% more women** with disabilities work part-time but want to work full-time compared to men and women without disabilities.

Perceived hiring and promotion bias

Almost half of Canadian adults **(48%)** believe people are more likely to be hired or promoted if they **hide their disability.**

Aim High

Rick Hansen was paralyzed at 15 years old, but went on to become one of Canada's most decorated Paralympic athletes and proved the potential of people with disabilities with his Man in Motion World Tour.

Michael J. Fox has limited motor skills because of Parkinson's disease, but that didn't stop the Canadian actor from becoming an Emmy and Golden Globe award winner.

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Appendix E

Appendix E Fundraising Tips

Fundraising

Your school may want to raise additional money to complete your Barrier Buster project. See our fundraising tips below:

How to Raise Funds

You can do this in a number of ways:

- Ask all students to bring in a small donation on the fundraising day (a toonie, for example).
- Incorporate a lunchtime bake sale. Students bring in cakes that are sold at lunchtime and/or recess to raise funds.
- Encourage your school to cover part of the distance Rick travelled on his world tour by logging the total distance students run, walk, row, cycle, etc. over a set course or time period (e.g. an eight-week fitness unit). Students ask for sponsorship e.g. a dime per kilometer they run.
- Provide a service such as a car wash or gift wrapping service.
- Involve members of the community, for example:
  a) Organize a walk/wheel challenge event. Students and family/friends complete a set distance by running, walking, cycling, roller-skating, wheeling a wheelchair, walking blindfold with a guide, walking with crutches, etc. Participants seek pledges to complete the event.
  b) Hold an 'a-thon' (e.g. spin-a-thon, wheel-a-thon, walk-a-thon, yoga-thon). Participants perform a specific activity for a certain distance or time and get sponsored for doing so.

You can make these events even more fun (and raise additional funds) by having live music, food and beverages, stalls from sponsors, talks on health and nutrition, and raffles. Other ideas for fundraising events include dinners, dances, sport tournaments, car washing, auctions, etc. However, please remember that certain events (e.g. raffles and sales of food and beverages) might require gaming licences.

Special note:

Set a financial target that you feel is attainable. Keep your event expenses as low as possible and where possible, ask individuals and/or local companies to donate supplies/services or offer discounts for your event needs. Expenses should not exceed 20% of funds raised (e.g. for every dollar you raise, roughly twenty cents or under is appropriate to spend).

Policies and procedures

Be sure to check with your Principal on policies and procedures related to fundraising in your school district.

Find out more

Rick Hansen School Program

The Rick Hansen School Program is a comprehensive set of resources for administrators, teachers and students designed to increase disability awareness, accessibility and inclusion, and empower young people to make a difference in their school, community and the world.

Learn more at www.rickhansen.com/Schools

Rick Hansen Foundation School Program

PRESENTED BY

FUTURE PROSPECTS

This Rick Hansen Foundation program is made possible by our Presenting Partner Boston Pizza Foundation Future Prospects, and the generous support of PIC Investment Group Inc., CGI, the Gordon and Ruth Gooder Charitable Foundation and The Slaight Family Foundation.

Rick Hansen Ambassadors

Ambassadors are individuals with a disability trained to deliver engaging presentations to students. An Ambassador presentation is a powerful and engaging way to demonstrate to your students the potential of anyone to make a positive difference in the world, and to highlight the importance of inclusion and the potential of people with disabilities.

Learn more at www.rickhansen.com/Ambassadors

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