

Resources for PJ Science Lesson Planning @ Queen's U Education Library




Find books: <http://qcat.library.queensu.ca> → QCAT tab → Full Catalogue


Find Articles: <http://library.queensu.ca> → Under Research by Subject → Education → Recommended Databases

This guide uses the theme of **PLANTS** for the **Grade 3 Science** curriculum as a model.

Teacher Candidate Passwords: <http://educ.queensu.ca> Log in to D2L: Student Resource course

Find ...	Search Tip
<p>Teacher Resources on the Web</p>	<div data-bbox="370 510 500 552" data-label="Section-Header"> <h2>Google</h2> </div> <div data-bbox="370 575 747 606" data-label="Text"> <p>But Google smartly. Check out:</p> </div> <div data-bbox="370 606 1526 724" data-label="List-Group"> <ul style="list-style-type: none"> ▶ Google tips for teachers at http://www.google.com/educators/index.html ▶ Lee & Sachi LeFever's Web Search Strategies in Plain English from <i>the commoncraft show</i> on YouTube </div> <div data-bbox="370 758 1206 821" data-label="Text"> <p>Apply operators: "lesson plan" OR "curriculum unit" plants "lesson plan" OR "curriculum unit" -.com</p> </div> <div data-bbox="370 848 1018 940" data-label="Text"> <p>Apply field limits: intitle:plants "lesson plan" inurl:plants "curriculum unit" site:org plants "curriculum unit"</p> </div> <div data-bbox="370 970 1078 1033" data-label="Text"> <p>Apply grade level: plants "lesson plan" "grade 3" -.com plants "lesson plan" primary -.com</p> </div> <div data-bbox="370 1062 1166 1123" data-label="Text"> <p>Use your knowledge of where there might be valuable lesson plans. For example, try "district school board"</p> </div> <div data-bbox="370 1155 1282 1247" data-label="Text"> <p>Try a variety of searches: plants "district school board" Ontario plants "lesson plan" "district school board" "interactive whiteboard" lesson plans primary</p> </div> <div data-bbox="370 1274 1459 1308" data-label="Text"> <p>Use the "search on this page" feature of your web browser to find your search terms quickly.</p> </div>
	<div data-bbox="370 1369 686 1409" data-label="Section-Header"> <h2>The Invisible Web</h2> </div> <div data-bbox="370 1411 1471 1472" data-label="Text"> <p>Search beyond the surface web to sites you know contain high-quality resources. Use your expertise as a teacher and your knowledge of the invisible web to find specialized resources.</p> </div> <div data-bbox="370 1501 828 1530" data-label="Section-Header"> <h3>5 Recommended Teacher Web Sites</h3> </div> <div data-bbox="370 1562 1521 1950" data-label="List-Group"> <ul style="list-style-type: none"> ▶ <i>Science NetLinks</i> http://www.sciencenetlinks.com/ Produced by the American Association for the Advancement of Science (AAAS), <i>Science NetLinks</i> is a science component of <i>thinkfinity.org</i>, the comprehensive, highly rated collection of teacher resources across all disciplines that is sponsored by Verizon in association with U.S. teacher associations. Explore Science NetLinks' recommended science web sites and lesson plans. ▶ <i>Thinkfinity</i> http://www.thinkfinity.org/ <i>Thinkfinity</i> can be searched for topics that cross disciplines. For ex. Search for information on ... Water / Reading & Language Arts / Grades K-2 </div> <div data-bbox="1091 1514 1539 1682" data-label="Image"> </div> <div data-bbox="1192 1795 1562 1950" data-label="Image"> </div>

	<p>▶ <i>The Magic Suitcase</i> http://www.magicsuitcase.ca/ A favourite site for teachers who want to connecting science and literacy. The creator of the Magic Suitcase site is Ontario educator, Judy Halpern. Judy is passionate about books and she is an expert at identifying the connections between stories and science topics. A high-value web site that is also fun to browse.</p>  <p>▶ <i>Elements Magazine and Virtual Library</i> Science Teachers Association of Ontario (STAO) http://www.stao.org/ are worth taking a quick look at. Queen's STAO login is:</p>  <p>▶ <i>Ontario Educational Resource Bank</i> Ontario Ministry of Education http://resources.elearningontario.ca There are sample resources at this site, but you should obtain password information from the "E-Learning Ontario" representative in your school board. Search in this database for OCUP to find the Ontario Curriculum Unit Planner lessons that Ontario teachers have created for the Ontario curriculum, Grades 1 to 8.</p> 
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<p>Inquiry in the School Library</p>	<p>The Ontario School Library Association supports the work of teacher librarians in Ontario. <i>Together for Learning: School Libraries & the Emergence of the Learning Commons.</i> http://www.accessola2.com/data/6/rec_docs/677_OLATogetherforLearning.pdf</p> <p>The TDSB shares the work of their teacher librarians: DOWNLOAD their guide for elementary teachers: <i>Imagine the Learning! A Guide for Elementary Teacher-Librarians and Teachers to Use with Students</i> https://qcat.library.queensu.ca/vwebv/holdingsInfo?bibId=2496627</p> <p>TDSB Elementary School Library http://www.tdsb.on.ca/libraries/Links.asp?schoolNo=10 The TDSB elementary school library template is a model set of resources for you and your students – many of which are freely available.</p>  <p>For your students, the Ontario government has purchased access to K-12 databases: Check out Grzimek's Animal Life and NovelList K-8 at http://eresources.knowledgeontario.ca/</p>
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<p>Teacher Guides For K-8 Textbooks</p> <p>Floor 2</p>	<p>Textbook teacher guides are a superb source of ideas, activities, and related resources. Head to these resources first to save yourself time. Most science textbooks are shelved in the Q to QR area on the New Textbook Collection on Floor 2.</p> <ul style="list-style-type: none"> ▶ Start: Library Home page: http://library.queensu.ca ▶ Click the QCAT tab. Click Full Catalogue. ▶ Click the Advanced Search ▶ Add search terms, select all/any/as a phrase, and the fields you want to search ▶ For example: for a primary grade science textbook from Scholastic, search: <p style="margin-left: 40px;">science primary...all of these ... Keyword Anywhere scholastic ...all of these ... Publisher:Name and from the Location drop-down, choose Education Library – Textbooks</p> <p>Tip: use primary or elementary for grade levels rather than "grade 1", etc. Other publishers of Ontario PJ science textbooks include: GTK Press, Addison Wesley, & Harcourt. For approved Ontario textbooks (Trillium List): http://www.edu.gov.on.ca/trilliumlist/</p> <p><i>National Geographic Reading Expeditions</i> student books & teacher guides: topics include life science, earth science, and physical science. Shelved in the New Textbook collection too.</p>
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Books for Science Teachers

Call # A to E
Floor 2

Call # F to Z
Floor 3

Science teaching
(Primary):
LB1532

Science teaching
(Elementary):
LB1585

Science topics:
Q to QR

- ▶ Start: Library Home page: <http://library.queensu.ca>
- ▶ Click the **QCAT** tab.
- ▶ Click **Full Catalogue**. Limit to **Education Library**.
- ▶ Use ? to expand words; use " " around phrases; use (term or term) for synonyms
- ▶ To find teaching ideas on a topic, do a Keyword Boolean search (use and / or):



For example:

(plant? or flower? or tree?) and (teach? or lesson? or activit?) and (primary or elementary)

Keyword Searches (and is the default)

science "children's literature"
"life cycle" elementary
strateg? teach? plant?
science "grade 3"

Keyword Boolean Searches (using and/or)

science and ("children's literature" or reading)
flower? and (fiction or literature)
plant? and (activit? or lesson? or teach?) and
elementary

Recent notable titles:

Differentiated Science Inquiry. LB1585.L55 2011
Hands on Science and Technology (Grades 1 to 7). LB1532.H36 to LB1532.H367 2000-2008
More Brain-Powered Science. LB1585.O29 2011
Place-Based Science Teaching and Learning: 40 Activities for K-8... LB1585.B87 2012
Supporting Grade 5-8 Students in Constructing Explanations in Science. LB1585.M38 2012

Search by publisher to see recent titles from the top educational publishers for K-8 education:

Search example: nsta or "national science teachers association" Keyword Boolean

NSTA Recommends is a free online service for Science teachers that identifies high quality teacher resources for K to 12 science topics: <http://www.nsta.org/recommends/>

Children's & Young Adult Books

Floor 1

- ▶ Select **Advanced Search**
- ▶ Add your keywords, select **all/any/as a phrase**, select "Within" fields
- ▶ From Location drop-down, choose **Education Library – Children's & YA**
- ▶ Note: a keyword search will find both non-fiction and fiction [P-PZ call #s].

- ▶ For more fiction & non fiction on a theme, use **NoveList Plus, Children's Literature Comprehensive Database, or A to Zoo**. Access these via QCAT.

Or

Begin at the Library Home Page <http://library.queensu.ca>
Scroll down to **Research by Subject** and select **Education**
Select **Recommended Education Databases**
Select **Children's Literature Databases**



Use **NoveList Plus**, the online teacher resource for finding children's stories on a theme. NoveList Plus can provide you with lists of titles that include a science concept in the story; all you have to do is find some of the titles in your school or local public library. **Novelist K-8** is **FREE** to everyone in Ontario: just go to: <http://eresources.knowledgeontario.ca/>

In our Education Library, **science resources are mainly shelved in the Q to QR call number range**– whether you are in the Children's collection, the Kits, the Textbooks, or the General Stacks. **Children's stories will be in the fiction call numbers** – which will begin with P, PR, PS....

Public Libraries often subscribe to Tumblebooks (and so do we): See <http://www.kfpl.ca> or QCAT

NSTA's Outstanding Science Trade Books is a free annual list of the best books for students K-12: <http://www.nsta.org/publications/ostb/> Links to science activities that connect to the books.

Track blogs you trust: One of my favorites is *Open Wide, Look Inside* – see the Science Lists <http://blog.richmond.edu/openwidelookinside/science-book-lists>

► Use the **Advanced Search in QCAT** and limit your search to **Education – Multimedia** or even the specific location. Or, do a search for the format you want.

Advanced Search

Audiobooks: This is a small collection that it is best to browse.

Big books: This, too, is a small collection that it is best to browse. For a list, do a keyword search for “big books”, or limit to Education Library – Big Books.

Kits: Limit to Education Library – Kits or add the word kit to your keyword search

Cassettes: Limit to Ed Lib Cassette/CDs cassette or search cassette? and your topic.

CDs: Limit to Ed Lib Cassette/CDs, or search compact and your topic.

Posters: Search (“study print” or poster) and your topic. (Easy to browse this collection too.)

Videos & DVDs: Search video? and your topic or dvd and your topic

Video Online:

Learn360

<http://learn360.ca>

A multimedia package purchased by the Ministry of Education for Ontario teachers. Classroom public performance rights are included in the deal. Contents include over 8,600 digital videos.



LOGIN NEW USERS

Enter Your Pass key
(Example: 12345-678910)

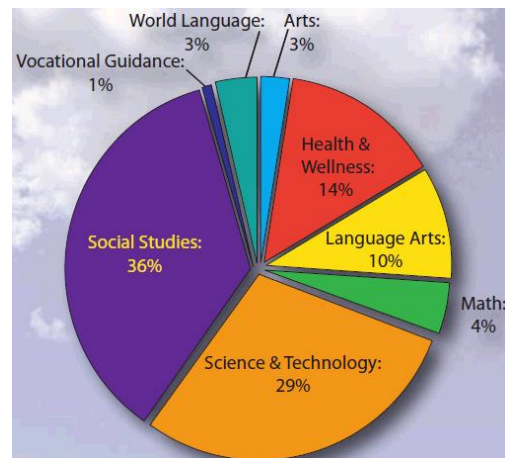
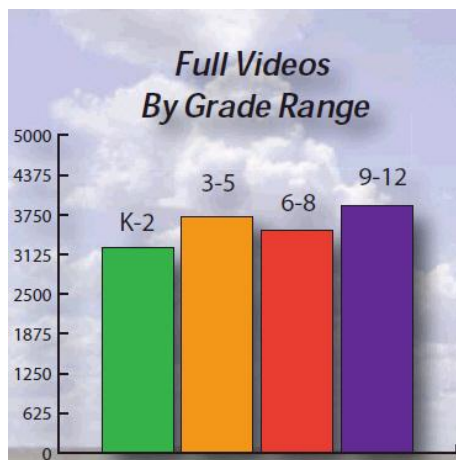
SUBMIT

For YOUR PERSONAL Learn360.ca account:

1. Go to <http://learn360.ca> and select the **NEW USERS** tab (top right corner):
2. Enter the your Queen’s Education Library passkey:
3. Each Queen’s teacher candidate can then create their own account, playlists, etc.

Multimedia

Floor 2



Access Learning

<http://accesslearning.com>

3,500 online videos. Username: educationlibrary Password: library

National Film Board Videos Online

<http://nfb.ca>

Over 1000 online NFB films are free to all Canadians. Queen’s University Library has paid the classroom public performance rights for this product, so you can show these videos in classrooms.

Interactive White Board Activities

Google for high quality SMARTBoard or Interactive whiteboard lessons.
Ex.: "interactive whiteboard" lesson activity plants

The Smartexchange is one possible source of lessons: <http://exchange.smarttech.com/> (can select USA or Canada)

SMARTboard plant activities used today:

Lifecycles: <http://www.crickweb.co.uk/ks2science.html#lifecycle5b>

Describing Plants: <http://exchange.smarttech.com/#tab=0>

Journals for Science Teachers

Start at <http://library.queensu.ca>

Under **Research by Subject**, click **Education** → **Recommended Education Databases**

Start with *Education Research Complete*.

Professional journals for K-8 Science teachers are not to be underestimated for their practical value. These science journals are available online and in print in our library.

Current Periodicals are shelved on the Display shelves behind the Reference Desk.

Bound periodicals are shelved on Floor 2, alphabetically by title (2009 and earlier). These may be signed out for 3 days. Renewals possible online.

Classroom Astronomer (for junior intermediate teachers)

Available online (link soon to be in the library catalogue)

Available in print on Floor 1 Current Periodicals section

Elements (online only as of 2009) (Science Teachers' Association of Ontario: STAO)

Full text available at : <http://www.stao.ca/>

Queen's University Library membership information:

Green Teacher is a valuable Canadian source for teachers K-12

Indexing & full text available via CBCA Education (1998 to the present)

<https://qcat.library.queensu.ca/vwebv/holdingsInfo?bibId=2096035>

SB & F (Science Books & Films) from the American Assoc for the Advancement of Science

Search QCAT for access to this title online or click this link:

<https://qcat.library.queensu.ca/vwebv/holdingsInfo?bibId=3309384>

Science and Children (National Science Teachers Association) for primary teachers

Indexed in Education Research Complete, 1993 – present

Full text is available in this database – ERC – from 2005.

Full text is available at <http://www.nsta.org> from 1996 – present

Science Scope (NSTA) for middle school teachers

Indexed in Education Research Complete, 1994 – present

Full text is available in this database – ERC – from 2004.

Full text is available at <http://www.nsta.org> from 1996 – present






Science Activities is a good source for activity & experiment ideas

Indexing and full text is available in Education Research Complete, 1990 on.

Search QCAT for access to this title online or click this link:

<https://qcat.library.queensu.ca/vwebv/holdingsInfo?bibId=2102957>

We also subscribe to the print edition of all three of these titles.

<p>Ministry of Education Documents</p> <p>Floor 2</p>	<p>▶ Search by keyword in QCAT for curriculum guidelines & other Ministry documents:</p> <p>curriculum science Ontario “grades 1-8” guide reading “ministry of education”</p> <p>▶ Search by keyword in QCAT for OCUP units: ocup “grade 2”</p> <div data-bbox="1024 170 1534 321" style="border: 1px solid black; padding: 5px; text-align: center;">  </div> <p>Elementary Curriculum online: http://www.edu.gov.on.ca/eng/curriculum/elementary/</p> <p><i>Ready, Set, Green! Tips, Techniques, and Resources from Ontario teachers.</i> C.G. 700.R43 2007 and online http://www.edu.gov.on.ca/eng/document/policy/environment.html</p> <p><i>Acting Today, Shaping Tomorrow: A Policy Framework for Environmental Education in Ontario Schools.</i> C.G. 700.A28 2009 and online http://www.edu.gov.on.ca/eng/teachers/enviroed/action.html</p>
<p>Reference Books</p> <p>Floor 1</p>	<p>This is another easy collection to browse. Use the Call number guide found in one of the slots the brick wall near this collection.</p>
<p>Use the Ellison Machine</p>	<p>The Ellison machine and dies are in the e-classroom, along with books and videos of ideas for using it.</p> <p>Our dies were selected with curriculum connections in mind.</p> <p>Ideas for the classroom are available on the Ellison web site at http://ellisoneducation.com</p> <p>Maple leaf die shown.</p> <div data-bbox="873 974 1040 1146" style="display: inline-block; vertical-align: middle;">  </div> <div data-bbox="1105 821 1495 1184" style="display: inline-block; vertical-align: middle; margin-left: 20px;">  </div>
<p>Professional Associations for Science Teachers</p>	<p><i>National Science Teachers Association (NSTA)</i> (U.S.): http://www.nsta.org/ Queen’s University Library has membership access.</p> <p><i>Science Teachers’ Association of Ontario (STAO)</i>: http://www.stao.ca/ Queen’s University Library has membership access.</p> <p><i>International Society for Technology in Education (ISTE)</i> (U.S): http://www.iste.org/ Queen’s University Library membership access: queens and serials</p>
<p>Software</p>	<p>Ontario Software Acquisition Program Advisory Committee http://www.osapac.org/ Browse resources at: http://www.osapac.org/db/view_resources.php</p> <p>Includes:</p> <ul style="list-style-type: none"> • Grolier Encyclopedia • Bitstrips for Schools • Learn360.ca <p>See the D2L Student Resources course for passwords to these resources.</p>