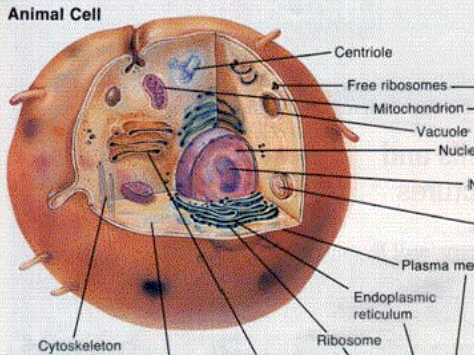
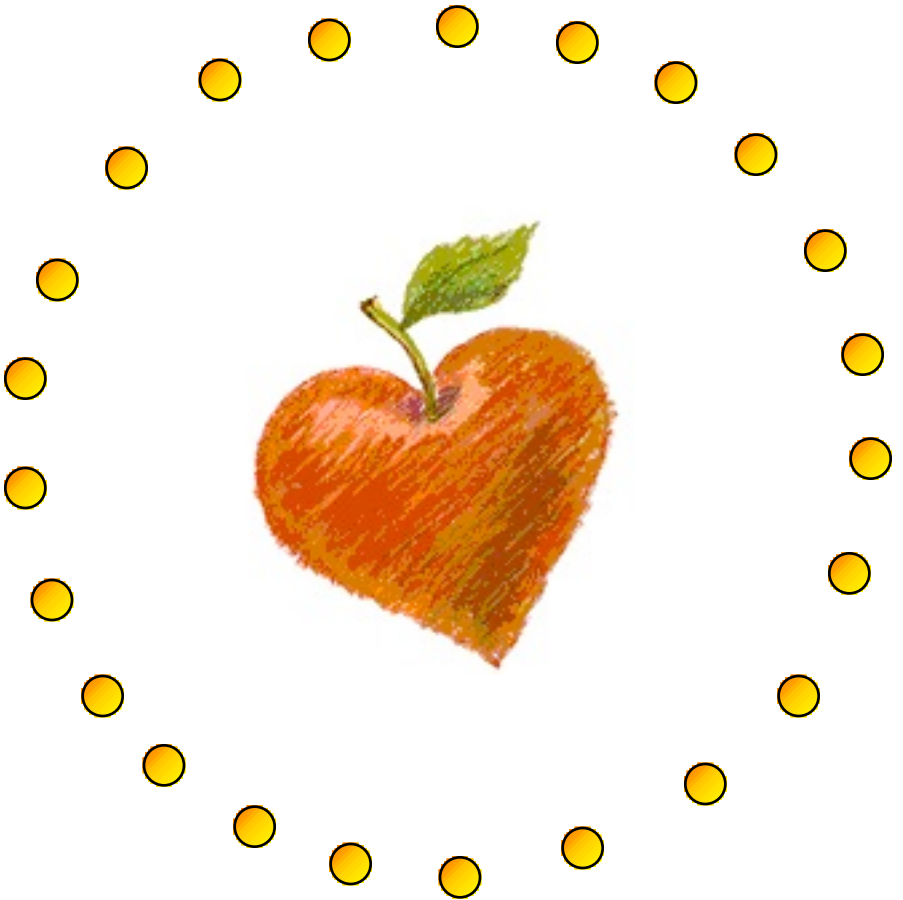
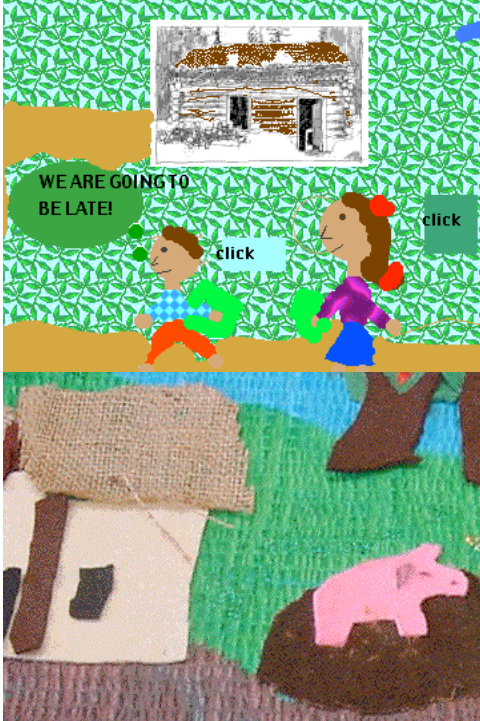


# Connecting ICT & Literacy




**Jim Strachan**

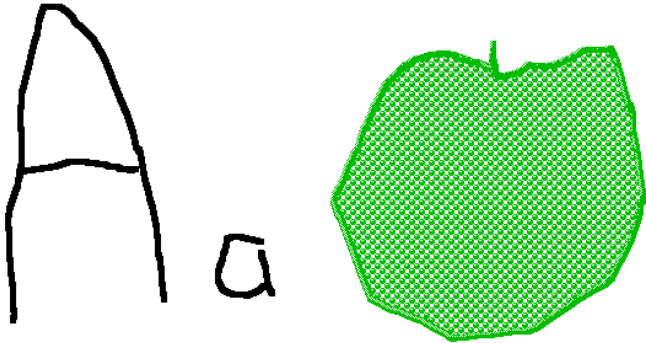
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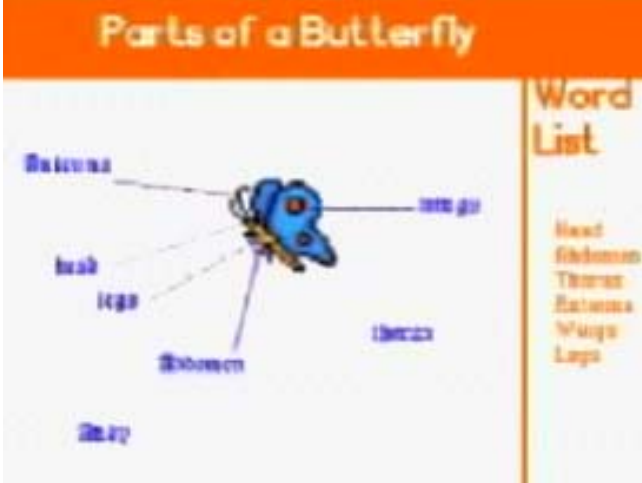
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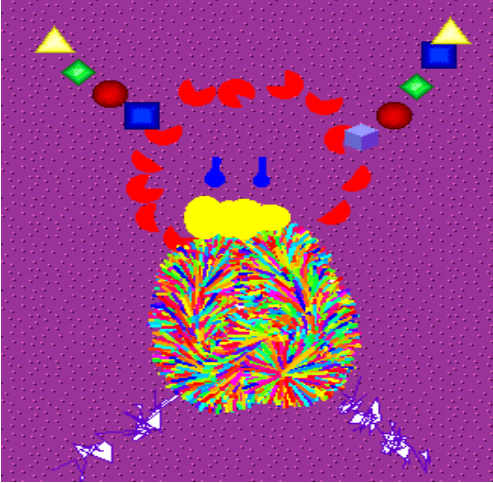
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\*Student work samples and resource files for each grade can be found on the ICT Standards site  
< <http://schools.tdsb.on.ca/asit/standards> >

Idea	What it Could Look Like	How ICT Connects
<p><b>KINDERGARTEN</b>  <b>Narratives in KidPix</b></p> <ul style="list-style-type: none"> <li>□ Students can draw a picture of something they like to do (ex. skip rope) and write a brief sentence describing what they are doing. As an extension they can record their voice narrating their story.</li> </ul>		<p><b>Curriculum Expectations: Language</b></p> <p><b>Overall Expectations</b></p> <ul style="list-style-type: none"> <li>□ communicate thoughts and feelings, using writing strategies that are appropriate for beginners</li> </ul> <p><b>Specific Expectations</b></p> <p><b>Oral Communication</b></p> <ul style="list-style-type: none"> <li>□ describe personal experiences and retell familiar stories, using appropriate vocabulary and basic story structure (e.g., beginning, middle, end)</li> </ul> <p><b>Reading</b></p> <ul style="list-style-type: none"> <li>□ demonstrate awareness of some conventions of written materials (e.g., text is written from left to right; words have spaces between them; words are spelled with upper and lowercase letters)</li> </ul> <p><b>Writing</b></p> <ul style="list-style-type: none"> <li>□ write simple messages using a combination of pictures, symbols, letters, phonetic spellings, and familiar words (e.g., grocery list, labels for a block or sand construction, such as a zoo or a space station)</li> </ul> <p><b>ICT STUDENT STANDARDS</b></p> <p><b>Research and Inquiry</b></p> <ul style="list-style-type: none"> <li>□ begin to investigate information pictorially (e.g., identify and discuss images)</li> </ul> <p><b>Communication and Collaboration</b></p> <ul style="list-style-type: none"> <li>□ explore drawing tools</li> <li>□ begin to communicate ideas using pictures and text (e.g., use KidPix to retell a personal event or story)</li> </ul> <p><b>Productivity and Applications</b></p> <ul style="list-style-type: none"> <li>□ begin to explore tool software (e.g., KidPix)</li> </ul>


Idea	What it Could Look Like	How ICT Connects
<p><b>GRADE 1</b>  <b>Class Alphabet Book</b></p> <ul style="list-style-type: none"> <li>□ Each student illustrates a page for a specific letter in KidPix. Using SlideShow the work of the class is combined together and each student narrates their own slide with their voice</li> </ul>		<p><b>Curriculum Expectations: Language Overall Expectations</b></p> <p><b>Writing</b></p> <ul style="list-style-type: none"> <li>□ communicate ideas (thoughts, feeling, experiences) for specific purpose (e.g., write a letter to a friend describing a new pet)</li> <li>□ use some materials from other media (e.g., computer clip-art) to enhance their writing</li> <li>□ begin to revise written work, with the assistance of the teacher</li> </ul> <p><b>Reading</b></p> <ul style="list-style-type: none"> <li>□ read a variety of simple written materials (e.g., signs, pattern books, rhymes, children’s reference books) for different purposes (e.g., for practice, information, vocabulary building, enjoyment)</li> </ul> <p><b>Oral and Visual Communication</b></p> <ul style="list-style-type: none"> <li>□ communicate messages, and follow basic instructions and directions</li> </ul> <p><b>ICT STUDENT STANDARDS</b></p> <p><b>Communication and Collaboration</b></p> <ul style="list-style-type: none"> <li>□ with assistance, communicate ideas and information using pictures and text (e.g., <i>publish a narrative using KidPix SlideShow</i>)</li> </ul> <p><b>Productivity and Applications</b></p> <ul style="list-style-type: none"> <li>□ begin to edit text and images within a document (e.g., <i>modify colour of font, add clip art, erase images</i>)</li> </ul>


Idea	What it Could Look Like	How ICT Connects
<p><b>GRADE 2</b> <b>Presenting Reports</b></p> <ul style="list-style-type: none"> <li>□ Using KidPix SlideShow students share the information they have learned about a curriculum based topic (e.g., Animals) with the rest of the class. They can give a presentation using a Projector or AverKey to the whole class or school.</li> </ul>		<p><b>Curriculum Expectations: Language</b> <b>Overall Expectations</b></p> <p><b>Writing</b></p> <ul style="list-style-type: none"> <li>□ communicate ideas (thoughts, feelings, experiences) for specific purposes (e.g., write a paragraph describing a trip to the farm for classmates)</li> <li>□ organize ideas in a logical sequence (e.g., write stories that have a beginning, middle, and end)</li> <li>□ revise and edit written work, focusing on specific features (e.g., sequence of ideas), with assistance from the teacher</li> <li>□ use and spell correctly the vocabulary appropriate for this grade level</li> </ul> <p><b>Reading</b></p> <ul style="list-style-type: none"> <li>□ read aloud in a way that communicates the meaning</li> <li>□ read independently, using reading strategies appropriate for this grade level</li> </ul> <p><b>Oral and Visual Communication</b></p> <ul style="list-style-type: none"> <li>□ communicate messages, and follow instructions and directions</li> <li>□ create simple media works</li> <li>□ use the conventions (e.g., sentence structure) of oral language, and of the various media, that are appropriate to the grade</li> </ul> <p><b>ICT STUDENT STANDARDS</b></p> <p><b>Communication and Collaboration</b></p> <ul style="list-style-type: none"> <li>□ use drawing tools to create images as part of a presentation in order to demonstrate and share knowledge about a specific curriculum topic (e.g., <i>the life cycle of a butterfly</i>)</li> <li>□ process information from more than one source and retell what has been discovered * (e.g., <i>illustrate information learned from a non-fiction text</i>)</li> </ul> <p><b>Productivity and Applications</b></p> <ul style="list-style-type: none"> <li>□ accomplish curriculum-based tasks by using tool software (e.g., <i>create a simple report comparing the properties of liquids and solids</i>)</li> </ul>


Idea	What it Could Look Like	How ICT Connects
<p><b>GRADE 3</b>  <b>Procedural Writing</b>            Students draw a monster and then write the step by step procedure for other students to follow. By reading the instructions the students create their own monster. Specific feedback can be provided by comparing before and after monsters. Classes can “exchange” Monster Procedures.</p>		<p><b>Curriculum Expectations: Language</b>  <b>Overall Expectations</b>  <b>Writing</b></p> <ul style="list-style-type: none"> <li>❑ organize ideas in a logical sequence, use correctly the conventions (spelling, grammar, punctuation, etc.) specific for this grade level</li> <li>❑ revise and edit written work, focusing on specific features (e.g. sequence of ideas), with assistance from the teacher</li> </ul> <p><b>Reading</b></p> <ul style="list-style-type: none"> <li>❑ use some conventions of written materials to help them understand and use the materials</li> </ul> <p><b>Oral and Visual Communication</b></p> <ul style="list-style-type: none"> <li>❑ communicate messages, and follow instructions and directions</li> <li>❑ create simple media works</li> <li>❑ view, read, and listen to media works with simple messages or factual information and describe what they have learned</li> </ul> <p><b>ICT STUDENT STANDARDS</b>  <b>Communication and Collaboration</b></p> <ul style="list-style-type: none"> <li>❑ begin to communicate electronically with people inside and outside the classroom (<i>e.g., communicate with e-pals on TEL</i>).</li> </ul> <p><b>Productivity and Applications</b></p> <ul style="list-style-type: none"> <li>❑ edit text and images within a document (<i>e.g., use spell-check, format headings, place and modify images to enhance presentation of information</i>)</li> </ul>


Idea	What it Could Look Like	How ICT Connects
<p><b>GRADE 4</b>  <b>Class Poetry</b>  <b>Anthology</b></p> <ul style="list-style-type: none"> <li>□ Using HyperStudio, students create and publish an anthology of poetry. Music, voice and effects like roll credits can be used to convey theme and mood.</li> </ul>		<p><b>WRITING</b>  <b>Overall Expectations</b></p> <ul style="list-style-type: none"> <li>□ produce pieces of writing using a variety of specific forms and materials from other media to enhance their writing</li> </ul> <p><b>Specific Expectations</b></p> <ul style="list-style-type: none"> <li>□ use phrases appropriately to clarify meaning</li> </ul> <p><b>READING</b>  <b>Overall Expectations</b></p> <ul style="list-style-type: none"> <li>□ read aloud, speaking clearly and with expression</li> </ul> <p><b>ORAL AND VISUAL COMMUNICATION</b>  <b>Overall Expectations</b></p> <ul style="list-style-type: none"> <li>□ create media works</li> </ul> <p><b>ICT STUDENT STANDARDS</b>  <b>Communication and Collaboration</b></p> <ul style="list-style-type: none"> <li>□ share ideas and information using tool software (<i>e.g., create a HyperStudio stack describing the natural resources and physical regions of a Canadian province</i>)</li> </ul> <p><b>Productivity and Applications</b></p> <ul style="list-style-type: none"> <li>□ accomplish curriculum-based tasks by using tool software (<i>e.g., publish a procedure that includes sound, text, and images</i>)</li> </ul>

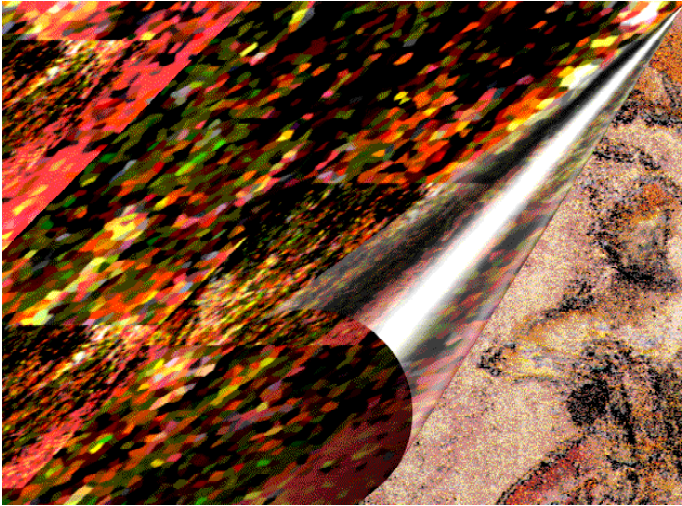
Idea	What it Could Look Like	How ICT Connects
<p><b>GRADE 4</b>  <b>Retelling of a Narrative</b></p> <ul style="list-style-type: none"> <li>□ Working in small groups, students act out a narrative they have read. The teacher takes digital photos of 5 or 6 scenes. Using iMovie or HyperStudio each student sequences the scenes and adds their voice to retell the narrative.</li> </ul>	<p>The begining of The seventh sister</p>	<p><b>WRITING</b>  <b>Overall Expectations</b></p> <ul style="list-style-type: none"> <li>□ communicate ideas and information for a variety of purposes and to specific audiences</li> <li>□ produce pieces of writing using a variety of specific forms (e.g., humorous story) and materials from other media (e.g., photo sequence) to enhance their writing</li> </ul> <p><b>Specific Expectations</b></p> <ul style="list-style-type: none"> <li>□ choose words that are most effective for their purpose (e.g., to describe vividly)</li> </ul> <p><b>READING</b>  <b>Overall Expectations</b></p> <ul style="list-style-type: none"> <li>□ state their own interpretation of a written work, using evidence from the work and from their own knowledge and experience</li> </ul> <p><b>Specific Expectations</b></p> <ul style="list-style-type: none"> <li>□ identify and describe elements of stories (e.g., plot, central idea, characters, setting)</li> <li>□ retell a story by adapting it for presentation in another way (e.g., as a dramatization)</li> </ul> <p><b>ORAL AND VISUAL COMMUNICATION</b>  <b>Overall Expectations</b></p> <ul style="list-style-type: none"> <li>□ communicate a main idea about a topic and describe a short sequence of events</li> </ul> <p><b>Specific Expectations</b></p> <ul style="list-style-type: none"> <li>□ use effective openings and closings in oral presentations</li> <li>□ present information to their peers in a focused and organized form on a topic of mutual interest</li> </ul> <p><b>ICT STUDENT STANDARDS</b>  <b>Communication and Collaboration</b></p> <ul style="list-style-type: none"> <li>□ share ideas and information using tool software (e.g., create a HyperStudio stack describing the natural resources and physical regions of a Canadian province)</li> </ul> <p><b>Productivity and Applications</b></p> <ul style="list-style-type: none"> <li>□ accomplish curriculum-based tasks by using tool software (e.g., publish a procedure that includes sound, text, and images)</li> </ul>


Idea	What it Could Look Like	How ICT Connects
<p><b>GRADE 5</b> <b>Autobiography</b></p> <ul style="list-style-type: none"> <li>❑ Students create an “All About Me” stack of their strengths, interests, and goals for the future. As an extension a digital photo of each student can be included. A class “All About Me” CD can be created and distributed to each student.</li> </ul>		<p><b>WRITING</b></p> <p><b>Overall Expectations</b></p> <ul style="list-style-type: none"> <li>❑ produce pieces of writing using a variety of forms (e.g., stories, poems, reports), narrative techniques (e.g., first- and third-person points of view, dialogue), and materials from other media (e.g., illustrations)</li> </ul> <p><b>Specific Expectations</b></p> <ul style="list-style-type: none"> <li>❑ use correct punctuation in final drafts</li> <li>❑ use levels of language appropriate to their purpose (e.g., informal language to write a letter to a friend and formal language to invite a guest speaker to the school)</li> </ul> <p><b>READING</b></p> <p><b>Overall Expectations</b></p> <ul style="list-style-type: none"> <li>❑ read a variety of fiction and non-fiction materials (e.g., novels, short stories, biographies, editorials) for different purposes</li> </ul> <p><b>ORAL AND VISUAL COMMUNICATION</b></p> <p><b>Overall Expectations</b></p> <ul style="list-style-type: none"> <li>❑ use the conventions (e.g., sentence structure) of oral language, and of the various media, that are appropriate to the grade</li> </ul> <p><b>ICT STUDENT STANDARDS</b></p> <p><b>Communication and Collaboration</b></p> <ul style="list-style-type: none"> <li>❑ present and share ideas and information using tool software (e.g., create a HyperStudio stack or web page describing the structure and function of the digestive system)</li> </ul> <p><b>Productivity and Applications</b></p> <ul style="list-style-type: none"> <li>❑ accomplish curriculum-based tasks by using tool software (e.g., create an autobiography that includes sound, text, and images)</li> </ul>


Idea	What it Could Look Like	How ICT Connects
<p><b>GRADE 5</b>  <b>Procedural Writing</b></p> <ul style="list-style-type: none"> <li>□ Using AppleWorks, students draw a monster and then write the step by step procedure for other students to follow. By reading the instructions the students create their own monster. Specific feedback can be provided by comparing before and after monsters. Classes can “exchange” Monster Procedures on Tel. This idea can be adapted to other curricular areas (e.g. Shape Exchange, Puppet Exchange etc.)</li> </ul>		<p><b>WRITING</b>  <b>Overall Expectations</b></p> <ul style="list-style-type: none"> <li>□ revise and edit their work, seeking feedback from others and focusing on content, organization, and appropriateness of vocabulary for audience</li> </ul> <p><b>Specific Expectations</b></p> <ul style="list-style-type: none"> <li>□ use phrases appropriately to clarify meaning</li> <li>□ use levels of language appropriate to their purpose</li> </ul> <p><b>READING</b>  <b>Overall Expectations</b></p> <ul style="list-style-type: none"> <li>□ explain their interpretation of a written work, supporting it with evidence from the work and from their own knowledge and experience</li> </ul> <p><b>Specific Expectations</b></p> <ul style="list-style-type: none"> <li>□ make judgements and draw conclusions about the content in written materials, using evidence from the materials</li> </ul> <p><b>ORAL AND VISUAL COMMUNICATION</b>  <b>Overall Expectations</b></p> <ul style="list-style-type: none"> <li>□ communicate information, explain a variety of ideas and procedures</li> <li>□ communicate a main idea about a topic and describe a sequence of events</li> </ul> <p><b>Specific Expectations</b></p> <ul style="list-style-type: none"> <li>□ contribute ideas to help solve problems, and listen and respond constructively to the ideas of others when working in a group</li> </ul> <p><b>ICT STUDENT STANDARDS</b>  <b>Communication and Collaboration</b></p> <ul style="list-style-type: none"> <li>□ present and share ideas and information using tool software (<i>e.g., create a HyperStudio stack or web page describing the structure and function of the digestive system</i>)</li> <li>□ independently communicate and collaborate electronically with people inside and outside the classroom (<i>e.g., consult an expert, use Silver Birch Banter Conference on TEL</i>)</li> </ul> <p><b>Productivity and Applications</b></p> <ul style="list-style-type: none"> <li>□ accomplish curriculum-based tasks by using tool software (<i>e.g., create an autobiography that includes sound, text, and images</i>)</li> </ul>


Idea	What it Could Look Like	How ICT Connects
<p><b>GRADE 6</b>  <b>Descriptive Paragraphs</b></p> <ul style="list-style-type: none"> <li>❑ Students create a picture of their peaceful place and then write a descriptive paragraph about it. Sound effects and music can be added to enhance mood.</li> </ul>		<p><b>WRITING</b></p> <p><b>Overall Expectations</b></p> <ul style="list-style-type: none"> <li>❑ produce media texts using writing and materials from other media (e.g., create a web page publicizing a cycling club)</li> </ul> <p><b>Specific Expectations</b></p> <ul style="list-style-type: none"> <li>❑ select words and expressions to create specific effects</li> <li>❑ integrate media materials (e.g., computer graphics) into their writing to enhance their message</li> </ul> <p><b>READING</b></p> <p><b>Overall Expectations</b></p> <ul style="list-style-type: none"> <li>❑ use conventions of written materials to help them understand and use the materials</li> </ul> <p><b>ORAL AND VISUAL COMMUNICATION</b></p> <p><b>Specific Expectations</b></p> <ul style="list-style-type: none"> <li>❑ create a variety of media works (e.g., create a video advertisement for a book as a member of an “advertising team”)</li> </ul> <p><b>ICT STUDENT STANDARDS</b></p> <p><b>Communication and Collaboration</b></p> <ul style="list-style-type: none"> <li>❑ determine an appropriate method to communicate and present information based on the intended audience (e.g., <i>spreadsheet vs. database, SlideShow vs. poster etc.</i>)</li> </ul> <p><b>Productivity and Applications</b></p> <ul style="list-style-type: none"> <li>❑ accomplish curriculum-based tasks by using tool software (e.g., <i>complete a project describing the physical characteristics of the solar system that includes sound, text, images, and animation</i>)</li> </ul>

Idea	What it Could Look Like	How ICT Connects
<p><b>GRADE 6</b>  <b>CD of Class Reports</b></p> <ul style="list-style-type: none"> <li>❑ Each student (or group) creates a research presentation in HyperStudio about a specific topic. (e.g., Early Explorers) Students share the information they have learned with the rest of the class. They can give a presentation using a Projector or AverKey to the whole class or school. The reports can be combined together to produce a class CD that all students can have.</li> </ul>		<p><b>WRITING</b></p> <p><b>Overall Expectations</b></p> <ul style="list-style-type: none"> <li>❑ communicate ideas and information for a variety of purposes (to inform, to persuade, to explain) and to specific audiences</li> <li>❑ proofread and correct their final drafts, focusing on grammar, punctuation, spelling, and conventions of style</li> </ul> <p><b>Specific Expectations</b></p> <ul style="list-style-type: none"> <li>❑ integrate media materials (e.g., computer graphics) into their writing to enhance their message</li> </ul> <p><b>READING</b></p> <p><b>Overall Expectations</b></p> <ul style="list-style-type: none"> <li>❑ decide on a specific purpose for reading, and select the material that they need from a variety of appropriate sources</li> </ul> <p><b>Specific Expectations</b></p> <ul style="list-style-type: none"> <li>❑ summarize and explain the main ideas in information materials (e.g., textbooks), and cite details that support the main ideas</li> <li>❑ plan a research project and carry out the research</li> </ul> <p><b>ORAL AND VISUAL COMMUNICATION</b></p> <p><b>Overall Expectations</b></p> <ul style="list-style-type: none"> <li>❑ use the conventions (e.g., sentence structure) of oral language, and of the various media, that are appropriate to the grade</li> </ul> <p><b>Specific Expectations</b></p> <ul style="list-style-type: none"> <li>❑ use tone of voice to enhance the message in presentations</li> </ul> <p><b>ICT STUDENT STANDARDS</b></p> <p><b>Communication and Collaboration</b></p> <ul style="list-style-type: none"> <li>❑ begin to create multimedia presentations that include sounds and images from a variety of sources (e.g., visual images, clip art, sound clips, and animated images)*</li> </ul> <p><b>Productivity and Applications</b></p> <ul style="list-style-type: none"> <li>❑ accomplish curriculum-based tasks by using tool software (e.g., complete a project describing the physical characteristics of the solar system that includes sound, text, images, and animation)</li> <li>❑ create documents that contain links and navigation systems (e.g., create a HyperStudio stack or web page profiling early explorers)</li> </ul>

Idea	What it Could Look Like	How ICT Connects
<p><b>GRADE 7</b></p> <p><b>Choose Your Own Adventure</b></p> <ul style="list-style-type: none"> <li>□ Students storyboard their writing plan on cards or chart paper and then use HyperStudio to publish an interactive narrative. Special effects (e.g. Ghost Writer and BlabberMouth) can be added.</li> </ul>		<p><b>ONTARIO CURRICULUM EXPECTATIONS</b></p> <p><b>Writing</b></p> <ul style="list-style-type: none"> <li>□ produce pieces of writing using a variety of forms, techniques and resources appropriate to the form and purpose, and materials from other media.</li> </ul> <p><b>Reading</b></p> <ul style="list-style-type: none"> <li>□ use their knowledge of the characteristics of different forms of writing to help them select the appropriate materials for a specific purpose.</li> </ul> <p><b>Oral and Visual Communications</b></p> <ul style="list-style-type: none"> <li>□ create a variety of media works</li> <li>□ describe and explain how sound and image work together to create an effect</li> </ul> <p><b>ICT STUDENT STANDARDS</b></p> <p><b>Communication and Collaboration</b></p> <ul style="list-style-type: none"> <li>□ prepare multimedia presentations for a variety of purposes and audiences (e.g., a slideshow, movie, or web page describing daily life in New France)</li> </ul> <p><b>Productivity and Applications</b></p> <ul style="list-style-type: none"> <li>□ accomplish curriculum-based tasks by using tool software (e.g., a multimedia project that includes sound, text, images, video, and animation)</li> <li>□ create and modify documents that contain links and non-linear navigation systems (e.g., create a web page or HyperStudio stack about interactions within ecosystems)</li> </ul>

Idea	What it Could Look Like	How ICT Connects
<p><b>GRADE 7</b></p> <p><b>Digital Advertisement</b> Working in small groups, students create an advertisement for a specific product. Using HyperStudio, iMovie or Claris HomePage they present and share their commercial with the rest of the class.</p>		<p><b>ONTARIO CURRICULUM EXPECTATIONS</b></p> <p><b>Writing</b></p> <ul style="list-style-type: none"> <li>❑ use writing for various purposes and in a range of contexts, including school work (e.g., to make point-form notes from a text, to jot down personal impressions)</li> </ul> <p><b>Reading</b></p> <ul style="list-style-type: none"> <li>❑ use their knowledge of the characteristics of different forms of writing to help them select the appropriate materials for a specific purpose.</li> </ul> <p><b>Oral and Visual Communications</b></p> <ul style="list-style-type: none"> <li>❑ create a variety of media works</li> <li>❑ contribute and work constructively in groups</li> </ul> <p><b>ICT STUDENT STANDARDS</b></p> <p><b>Communication and Collaboration</b></p> <ul style="list-style-type: none"> <li>❑ prepare multimedia presentations for a variety of purposes and audiences (e.g., a slideshow, movie, or web page describing daily life in New France)</li> </ul> <p><b>Productivity and Applications</b></p> <ul style="list-style-type: none"> <li>❑ accomplish curriculum-based tasks by using tool software (e.g., a multimedia project that includes sound, text, images, video, and animation)</li> <li>❑ create and modify documents that contain links and non-linear navigation systems (e.g., create a web page or HyperStudio stack about interactions within ecosystems)</li> </ul>

Idea	What it Could Look Like	How ICT Connects
<p><b>GRADE 8</b></p> <p><b>Public Service Announcement Movie or Presentation</b></p> <p>Using iMovie, students create a 30-60 second Public service announcement to increase awareness of a local (or global) issue. They may use a digital camera to film and/or create and present images in AppleWorks, HyerStudio or Corel Presentations.</p>		<p><b>ONTARIO CURRICULUM EXPECTATIONS</b></p> <p><b>Writing</b></p> <ul style="list-style-type: none"> <li>❑ communicate ideas and information for a variety of purposes and to specific audiences, using forms appropriate for their purpose and features appropriate to the form.</li> </ul> <p><b>Reading</b></p> <ul style="list-style-type: none"> <li>❑ use a variety of conventions of formal texts to locate information they need.</li> </ul> <p><b>Oral and Visual Communications</b></p> <ul style="list-style-type: none"> <li>❑ create media works of some technical complexity</li> </ul> <p><b>ICT STUDENT STANDARDS</b></p> <p><b>Communication and Collaboration</b></p> <ul style="list-style-type: none"> <li>❑ design and present multimedia projects (<i>e.g., web pages, newsletters, slideshows, movies</i>)</li> <li>❑ evaluate presentation methods and modify them for particular needs to effectively convey information to an intended audience</li> </ul> <p><b>Productivity and Applications</b></p> <ul style="list-style-type: none"> <li>❑ accomplish curriculum-based tasks by using tool software (<i>e.g., a multimedia presentation that includes sound, text, images, video, and animation</i>)</li> </ul>

Idea	What it Could Look Like	How ICT Connects
<p><b>GRADE 8</b></p> <p><b>Digital Yearbook</b> Using HyperStudio, students create a class or school CD Yearbook to give to everyone at the end of the year. Scanned and digital photographs can be used. Other programs (e.g. iMovie) can be integrated. The HyperStudio Player can be added so all students can view the CD at home.</p>		<p><b>ONTARIO CURRICULUM EXPECTATIONS</b></p> <p><b>Writing</b></p> <ul style="list-style-type: none"> <li>❑ produce media texts using writing and materials from other media.</li> </ul> <p><b>Reading</b></p> <ul style="list-style-type: none"> <li>❑ use the special terminology in a particular area of study, as necessary.</li> </ul> <p><b>Oral and Visual Communications</b></p> <ul style="list-style-type: none"> <li>❑ create media works of some technical complexity</li> <li>❑ describe a media work, outlining its different parts and the steps and choices involved in planning and producing it.</li> </ul> <p><b>ICT STUDENT STANDARDS</b></p> <p><b>Communication and Collaboration</b></p> <ul style="list-style-type: none"> <li>❑ design and present multimedia projects (<i>e.g., web pages, newsletters, slideshows, movies</i>)</li> </ul> <p><b>Productivity and Applications</b></p> <ul style="list-style-type: none"> <li>❑ create, modify, and evaluate documents that contain links and non-linear navigation systems (<i>e.g., create a web page or HyperStudio stack about the Charlottetown Conference</i>)</li> </ul>

## ACCESS TO COMPUTERS

During many of my school visits access to computers seems to be a recurring "real world" issue (i.e. I have 1 or 2 or 3 machines in my classroom and 30 students). Here's what I've been saying. I'd welcome the contributions/thoughts of others.

When I started teaching I was told (and believed) that the computer(s) in my classroom should be on and used 100% of the time. So what I did was I set up a schedule where students went on in 30 minute shifts. While this guaranteed "equal access", I soon began to notice a few issues.

- Faizal was always on when I was teaching Math
- When I was reading to the class or having community circle or teaching something "important" I wanted EVERYONE'S full attention and I'd have to ask students to leave the computer or turn down the sound
- Students often "missed" their time (field trips, PD days, Monday holidays) and they remembered missing them (even if they didn't remember where their pencil was!)

So over time I taught (and lived with my students) a different model. How students accessed the computer was on a "need to use" basis. In a nutshell they made a proposal to me and if I said "yes" that's how they got on. Here's how it worked for me (and could work in your classroom).

### **Start of the Year**

You provide the purpose and do some direct teaching of the skills the students will need to know.

KidPix example: Create a picture in KidPix of all the things you like.

HyperStudio example: Create a 3 page stack of your interests.

In both cases I'd provide a realistic due date (knowing I had 30 students and x # of computers). Then each day, students would make proposals. "Mr. S. can I use the computer to begin my stack." My answer would (usually) be "yes and track yourself."

Beside the computer I'd have a large chart with each student's name. Beside their name they'd place the abbreviation for the software (or task) they were doing -- example H for HyperStudio, K for KidPix.

After a few days use/access became pretty apparent, Christie had 9 H's, Jamie 0. The next day, I'd go over to Jamie and encourage him to begin the task. By the end of a month the chart would be full so I'd put up a new one (and keep the old). It provided a really clear record of how the students were using computers and what they were doing.

As more computers came into the classroom, I also (when possible) had the students work on the same computer every time and save to personal folders. Then when parents came for interviews, with a few clicks I could show them all that their children had done on the computer. The parents were amazed. I also found that working on the same computer promoted “ownership”, especially with older students.

### **As the Year Progresses**

As my students became more familiar with the technology I’d make a concerted effort to teach them the ability to use it as a resource.

A small example would be during our study data management. The students would take a survey and make a tally and then graph their information on paper. I’d then have them graph the same information in KidPix. After they’d done the task using both methods, we’d compare using a T chart.

What were the advantages of paper (in many cases at first it was faster, you could use more colours etc.) vs. Computer (likely to be more accurate, easier to draw straight lines etc.). Then I’d give the students a task and have them choose the most efficient way of accomplishing it. We as adults do that all the time!

The great moments for me as a teacher would be when we were doing something (like hatching duck eggs with Grade 2’s) and some of my students would come with a proposal “Could we make a stack of how the duck comes out of the egg”). They had started to make the connections and integrate the technology into their learning. This is a lofty (and long range) goal, but getting away from the schedule was Step #1.

Jim Strachan

## **Electronic Portfolios**



Everybody (especially primary students!) loves to print. Even if it's just a few squiggly lines there's something about seeing their work on paper that is powerful for students. To address this need, but still preserve ink and paper, I had my students save to individually named folders. This can work both in the 1 (or few) computer classroom and in a lab setting.



With my Grade 2's if they wanted to print I said "see me on Friday afternoon." Come Friday afternoon it was amazing how many students could live without seeing their work printed. For those that wanted to print, we did one big print run. Eventually, every second, then every third Friday became the print run. I also reminded them that their work was still there on the computer and that they could "visit" it any time they were on.



Meanwhile, all the work the students did accumulated in their personal folders. Come report card time, I had an electronic portfolio of each student's work on the computer. (ex. their exposition in AppleWorks, personal stack in HyperStudio etc.) When parents came for their interview this portfolio complimented the paper portfolio I had for each student.



As an extension, with my Grade 5's and Grade 8's, at the end of term I had them select (and print if needed) one piece of work they accomplished on the computer during the term. After selecting, they wrote "portfolio reflections" about why they had chosen this particular piece and what learning(s) on their part it reflected. Again, this was powerful for both students and parents.



To celebrate their work we would create class CD's. On the CD was work related to a specific assignment or topic from every student. If this is something you are interested in doing, the ASA's in your school and/or your ASIT Leader can provide assistance.



The common element of all of these ideas (I hope) is that they acknowledge and celebrate the fact that the computer can be used as part of the learning environment in the classroom; connected to the curriculum and to the assessment process we engage in for every student.

## USING STUDENTS AS A RESOURCE

In our schools we have a vast talent pool...our Students!

Many schools I've been visiting are training "Tech Helpers". Here are some suggestions of how they could be used.

With my Grade 5's I assigned them in pairs to other teachers in the school. So for example if the Grade 2 teacher couldn't print, Basil would go downstairs and troubleshoot. Basil felt great, my time was saved and the teacher got help.

In a Lab setting ask for 2 or 3 "Tech Helpers" from each class you teach. These students can help with time savers like making sure things are "in order" after each class and/or minor troubleshooting once a week/month?! (ex. cleaning the mice, keyboard connections, software installation etc...)

Another useful idea is to have the "older" kids write procedures (hey-First Steps!) for common tasks. Here's how it could work: The Grade 5's in a school could write the steps for their Grade 1 "Learning Partners" for saving a file in Kid Pix....or using the Eraser Tool..or Printing...etc..

An extension could be in "Learning Partners" time they could work on the computer together to help master these skills. One essential principle I'd stress to my Grade 5's was not to touch the mouse and click, click click, but rather to guide the younger students with words and visual prompts.

The Procedures (with illustrations) could be posted on Large Index Cards and taped up beside the computer(s) in the Grade 1 room. Not only does it provide a useful reference for the students...it is also potentially useful for the teacher!

Also, when your kids learn how to do something that you haven't taught or don't know how to do (ex. how to make a text object transparent in HyperStudio), have them share their "discovery" either with the whole class or a small group at the computers. It's amazing how when we share the load of learning (anything!) with our students (and each other!), how much lighter it becomes for all of us!

Jim Strachan

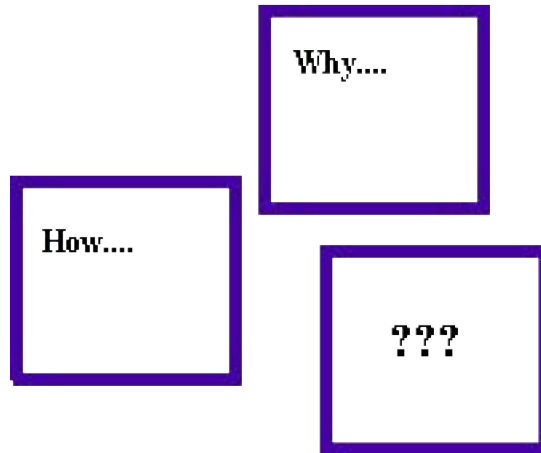
	<b>Computers in the Classroom</b>	<b>LAB with “Computer Teacher”</b>	<b>Lab with “bookings” by Classroom Teacher</b>
<b>ACCESS</b>	<ul style="list-style-type: none"> <li>•Easier Access than Lab for “need to use” basis....direct supervision is ensured</li> <li>•Number of Computers is usually much, much smaller than # of students, creating access issues (schedules, proposals, reward systems)</li> </ul>	<ul style="list-style-type: none"> <li>•Classes are usually booked for specific times (ex. once a week)...more difficult to have “need to use access”</li> <li>•Number of Computers is usually enough for each student or pairs of students to have their own machine</li> </ul>	<ul style="list-style-type: none"> <li>•Classes are usually booked for specific times...some possibilities of “need to use access” but advanced planning is usually required</li> <li>•Number of Computers is usually enough for each student or pairs of students to have their own machine</li> </ul>
<b>OWNERSHIP</b>	<ul style="list-style-type: none"> <li>•Ownership of Classroom teacher for what happens on the computer is increased</li> <li>•Troubleshooting is primarily the responsibility of classroom teacher and often his/her students</li> </ul>	<ul style="list-style-type: none"> <li>•Computer Teacher generally responsible for assessment and programming</li> <li>•Troubleshooting is primarily the responsibility of the Computer Teacher</li> </ul>	<ul style="list-style-type: none"> <li>•Ownership of the Classroom teacher is promoted, however level of comfort/competence in a lab setting varies</li> <li>•Troubleshooting is problematic...who’s responsible is often an issue</li> </ul>
<b>INSTRUCTION/ INTEGRATION</b>	<ul style="list-style-type: none"> <li>•Less likely to have AverKey, LCD Pad or Projector for direct instruction</li> <li>•More easily viewed by students and teachers as part of an integrated programming tool and as part of the classroom culture</li> </ul>	<ul style="list-style-type: none"> <li>•Likely to have AverKey, LCD Pad or Projector for direct instruction</li> <li>•Depending on personalities, communication and scheduling (ex. prep) can be an either integrated or isolated experience for students</li> </ul>	<ul style="list-style-type: none"> <li>•Somewhat likely to have AverKey, LCD Pad or Projector for direct instruction</li> <li>•Can provide opportunities for integration but onus is on the classroom teacher to make these connections</li> </ul>
<b>NOTES</b>	<ul style="list-style-type: none"> <li>•Dismantling a lab increases the # of computers in classrooms</li> <li>•Pods or groupings of computers can also address the #'s issue (more practical in an open concept school)</li> </ul>	<ul style="list-style-type: none"> <li>•A dynamic person in this role could ensure all students get a sound developmental experience</li> <li>•Strong Curricular as well as “technical” skills are required</li> </ul>	<ul style="list-style-type: none"> <li>•In a perfect world this method represents a compromise between #1 and #2...but in the real world this method often leads to a lab where not much works and people are frustrated</li> </ul>

## •Researching Information on the Internet•

### Focus Questions

Have the student(s) come up with specific questions they will research. You could begin with “wonder questions”.....students simply write down on yellow stickies all the things they’d like to know about a particular topic... (ex. What were the names of the Greek Gods and Goddesses? or How were the Pyramids built?). Post the stickies all around your classroom and have the students sort them, either by topic (ex. education) or by civilization (ex. Mayan, Greek etc..). You as the teacher could also provide students with focus questions

linked to the expectations for the unit. The students researching on the Internet take a sticky (or 2 or 3) with them and research the answers. You could have them share with the rest of the class not only “the answers” but how they searched and what techniques they used. In advance of the unit you could also bookmark sites in several ways (class conference on NTEL, links from an AppleWorks, Word or Adobe Acrobat document, a list of sites sorted by topic on chart paper near the computer). Focus questions greatly reduce the tendency of the student to press “PRINT” as soon as they find a site remotely linked to their topic. They encourage more careful reading and distilling of information.



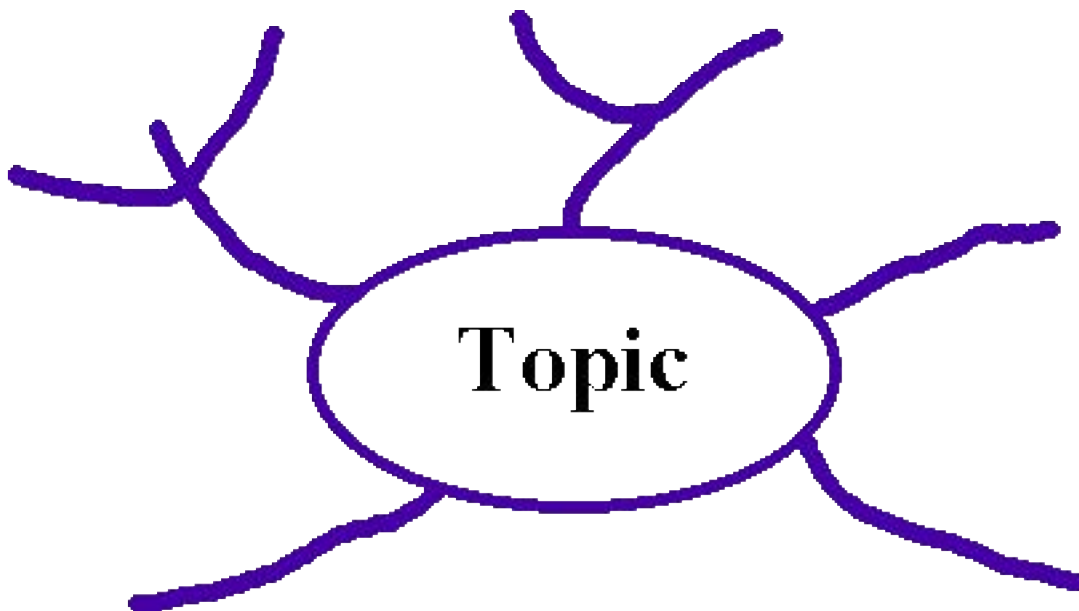
### Jot Notes

Making jot (point form) notes is a skill that needs to be taught and modelled. Practice with students by giving them a one page printed passage and highlighter. Provide some focus questions (ex. How were schools organized in Athens? What was taught in them?). They read the page and highlight the relevant information. After completing the task they then make jot notes that answer the focus question(s). Students can also do this on line by highlighting text and pasting it into the word pad or a word processing document. Again this technique focusses the students reading of the information when they come to a web site.

- answer to focus ?  
- answer to focus ?  
- answer to focus ?

## Mind Map

Once the students have gathered a large body of information they can use a Mind Map to record what they know. Using pictures, symbols and words they organize and present their information on a large piece of chart paper. This non-linear method lends itself very well to putting their research into a HyperStudio Stack. Each branch of the Mind Map represents a link to a different card or page. The lines connecting different topics represent the buttons that the students will use to link their stack together. Using the Storyboard function of HyperStudio allows students to keep from “getting lost” in their own stack as does having an original Mind Map on paper to refer to throughout the process. Similar to Jig Saw this technique is very efficient for conveying information. Each group can research and become expert on one aspect of a topic and then present and share their knowledge with the rest of the class using HyperStudio, AppleWorks SlideShow, Handouts created in word etc...



## Starting Points for Student Research

<http://www.linktolearning.com>

Provides students with lists of sites directly associated with Ontario Curriculum Topics....An excellent starting point for focussed research Grades 3 -8

<http://www3.sympatico.ca/trudy.miller/nahome.html>

Linked web resources for both students and teachers to the Ontario Curriculum Topics...especially useful for Grades 3 - 6 Science and Social Studies research

[http://www.ocdsb.edu.on.ca/Teacher\\_Res/](http://www.ocdsb.edu.on.ca/Teacher_Res/)

Select Curriculum Connections and then the curricular area and grade and your students will find web links for virtually any topic connected to the Ontario Curriculum (K-8)

<http://www.kidsclick.org>

(American) What you'll find there are links to sites sorted by curriculum areas and better yet with the approximate reading level of each site. (ex. K-3, Gr. 4-6, Gr. 7+)