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# ICT Integration

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2<sup>nd</sup> Grade

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McGraw  
Elementary,  
Fort Collins, CO  
USA





## Transdisciplinary Theme: Who we are

**Central Idea:** People can learn skills to develop their well-being.

### Lines of Inquiry:

1. Developing healthy habits (physical, emotional, nutritional)
2. Skills that impact well-being

Learning engagements	PSD technology standard/s	ICT skills (PSD Technology Operations and Concepts)	Applications and devices	PYP transdisciplinary and ICT skills
Create collages that illustrate what makes you well-balanced	Creativity and Innovation	<ul style="list-style-type: none"> <li>• Insert pictures and stickers</li> <li>• Paint brush and paint bucket</li> <li>• Type into a text box</li> <li>• Delete, edit, move and resize typing, text boxes, pictures and stickers</li> <li>• Save to and open from folder on the server</li> </ul>	Pixie or Inspiration  Mouse and keyboard  Digital camera (to take pictures of each other to insert)	+Creating +Synthesis +Non-verbal communication + Writing
Develop and analyze tables and charts that illustrate daily eating habits	Research and information fluency  Critical Thinking, problem solving and decision making	<ul style="list-style-type: none"> <li>• Create and enter data into a table</li> <li>• Edit data in table cells</li> <li>• Format a table</li> <li>• Convert a table into a chart</li> <li>• Print table and chart</li> <li>• Save to and open from folder on the server</li> </ul>	Excel, Word or Open Office Calc.	+Investigating +Organizing + Analysis + Evaluation + Viewing + Collecting, Recording, Organizing and Interpreting data
Compare the nutrition, exercise, sleep and recreation habits of children in other countries to our own	Research and information fluency  Critical Thinking, problem-solving and decision making  Communication and collaboration  Digital citizenship	<ul style="list-style-type: none"> <li>• Use websites and online collaboration sites to conduct research and share ideas</li> <li>• Navigate to shared bookmarks on the McGraw website</li> <li>• Type data, questions and ideas into a shared table or web page</li> </ul>	Culture Grams  online food pyramid websites from various countries  pbworks, ePals or Google Docs	+ Investigating + Organizing + Communicating + Collaborating + Organizing + Becoming responsible digital citizens + Respecting others + Cooperating + Reading + Presenting + Safety + Codes of behavior + Interpreting data



## Transdisciplinary Theme: How the world works

**Central Idea:** Forces and motion are used in our lives and impact society.

### Lines of Inquiry:

1. How forces affect motion (pushes, pulls, gravity, friction, inertia)
2. How humans use forces and motion in their lives

Learning engagements	PSD technology standard/s	ICT skills (PSD Technology Operations and Concepts)	Applications and devices	PYP transdisciplinary and ICT skills
Engage in online simulations to explore the impact of various types of forces on motion	Creativity and Innovation  Critical thinking, problem solving and decision making	<ul style="list-style-type: none"> <li>• Navigate to shared bookmarks on the McGraw website</li> <li>• Manipulate variables in Flash animation video</li> </ul>	Roller Coaster Designer  Physics Games: Gravity Master, Fantastic Contraption  Mouse and keyboard	+Investigating +Creating +Observing +Analysis +Synthesis +Application
Research and share how people use simple machines and understanding of forces and motion to design machines that make work easier	Research and information fluency  Communication and collaboration	<ul style="list-style-type: none"> <li>• Navigate to shared bookmarks on the McGraw website</li> <li>• Use table of contents and search function to navigate online database</li> <li>• Copy and paste photos into folder on the server (using control + C and control + V)</li> <li>• Insert photos into a document</li> <li>• Basic word processing skills</li> </ul>	Worldbook Online  Mouse and keyboard  Pixie or Google Docs presentation  Headphones and Read Please (for students who need assistance reading from WorldBook)	+ Investigating + Communicating + Comprehension + Reading + Viewing + Writing + Presenting
Create diagram and an accompanying advertisement for a proposed machine that will do work for students	Creativity and innovation	<ul style="list-style-type: none"> <li>• Use drawing and shapes tools</li> <li>• Basic word processing skills</li> <li>• Delete, edit, move and resize typing, text boxes, and drawings</li> <li>• Save to and open from folder on the server</li> </ul>	Pixie  Word or Open Office Writer  Keyboard and mouse	+ Creating + Communicating + Application + Presenting



## Transdisciplinary Theme: How we organize ourselves

**Central Idea:** People create organizing systems within a community to aid interdependence.

### Lines of Inquiry:

1. The reasons people form communities.
2. The need for laws and rules.
3. Areas for citizens to live and work.

Learning engagements	PSD technology standard/s	ICT skills (PSD Technology Operations and Concepts)	Applications and devices	PYP transdisciplinary and ICT skills
Explore, identify and compare different areas of a community (commercial, residential, industrial, rural, recreational) as they appear and are organized in various communities around the world.	Research and information fluency  Critical thinking, problem solving and decision making	<ul style="list-style-type: none"> <li>• Type, copy and paste information into search bar (using control + C and control + V)</li> <li>• Use zoom and navigation controls to explore Google Earth</li> <li>• Enter and edit data in a table</li> <li>• Save to and open from folder on the server</li> </ul>	Google Earth  Excel, Word or Open Office Calc.  Mouse and keyboard	+Investigating +Organizing +Comprehension +Synthesis +Writing +Organizing data + Interpreting data
Create a drawing with text and narration that illustrates/describes the difference between one area of a community as it is organized in our local community and a different community (such as Hong Kong)	Research and information fluency  Creativity and innovation  Communication and collaboration	<ul style="list-style-type: none"> <li>•Paint brush and paint bucket</li> <li>•Type into a text box</li> <li>• Delete, edit, move and resize typing, text boxes, pictures, stickers and drawings</li> <li>• Save to and open from folder on the server</li> <li>•Upload drawing to Website (if using Voice Thread, pbworks or ePals)</li> <li>• Create, edit, delete voice recordings</li> <li>• Use headphones to listen to voice recordings</li> </ul>	Pixie  Mouse and keyboard  Microphone and headphones  Voice Thread, pbworks or ePals (if sharing with a wider audience or collaborating with a class in a different community)	+ Investigating + Creating + Communicating + (Collaborating) * + (Becoming responsible digital citizens) * + (Respecting others) * + Viewing + Presenting + Analysis + (Codes of behavior) *  * If sharing this project online and/or collaborating with students from another school



## Transdisciplinary Theme: Where we are in place and time

**Central Idea:** Communities develop over time.

### Lines of Inquiry:

1. A study of a local community.
2. Similarities and differences of two communities.
3. Changes in the environment of a community.

Learning engagements	PSD technology standard/s	ICT skills (PSD Technology Operations and Concepts)	Applications and devices	PYP transdisciplinary and ICT skills
Use an online collaboration site to pose questions about and the results of investigation into the development of our local community as compared to other communities (domestic and international)	<p>Communication and collaboration</p> <p>Research and information fluency</p> <p>Digital citizenship</p>	<ul style="list-style-type: none"> <li>• Create, edit, delete voice recordings</li> <li>• Use headphones to listen to voice recordings</li> <li>• Download, copy, paste photos into folder on the server</li> <li>• Upload photos to online collaboration area</li> <li>• Upload profile drawing, icon or photo to online collaboration area</li> <li>• Digitally manipulate (crop, apply filters, resize) photos to upload to collaboration area</li> <li>• Post spoken/typed questions and comments</li> </ul>	<p>Voice Thread, pbwiki or ePals</p> <p>Microphone and headphones</p> <p>Mouse and keyboard</p> <p>Gimp, Pixie, Microsoft Photo Editor (photo editing programs)</p>	<ul style="list-style-type: none"> <li>+ Investigating</li> <li>+ Communicating</li> <li>+ Collaborating</li> <li>+ Becoming responsible digital citizens</li> <li>+ Formulating questions</li> <li>+ Presenting research findings</li> <li>+ Acquisition of knowledge</li> <li>+ Comprehension</li> <li>+ Respecting others</li> <li>+ Speaking</li> <li>+ Listening</li> <li>+ Reading</li> <li>+ Writing</li> <li>+ Viewing</li> <li>+ Presenting</li> </ul>
Research and take notes about the history and development of our local community	<p>Investigating</p> <p>Organizing</p> <p>Becoming responsible digital citizens</p>	<ul style="list-style-type: none"> <li>• Navigate to shared bookmarks on the McGraw website</li> <li>• Navigate and search within websites</li> <li>• Basic word processing skills</li> <li>• Use own words to record information</li> </ul>	<p>Fort Collins history websites</p> <p>Microsoft Word or Open Office Writer</p> <p>Mouse and keyboard</p>	<ul style="list-style-type: none"> <li>+ Investigating</li> <li>+ Organizing</li> <li>+ Communicating</li> <li>+ Becoming responsible digital citizens</li> <li>+ Acquisition of knowledge</li> <li>+ Comprehension</li> <li>+ Collecting data</li> <li>+ Recording data</li> <li>+ Organizing data</li> <li>+ Reading</li> <li>+ Writing</li> </ul>