

Project-Based Learning for the 21st Century

Gail Lovely

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- Learn how to use project-based learning to **help your students develop essential 21st century skills**, including communication, time management, self-assessment, and leadership. **In this interactive, hands-on session**, Gail introduces project-based ideas in which your role is that of coach, facilitator, and co-learner. You'll leave with numerous **concrete ideas** for implementing project-based learning in your classroom.

Think back...



Campylobacter starting to run.

It's not quite so bad as I thought it was but it's still there.

John's still in the hospital. He's been there for a while.

And down the road. There's a big one. It's a big one.

What's happening in the north?

I'm not sure. I'm not sure.

It's a big one. It's a big one.

They're not sure. They're not sure.

It's a big one. It's a big one.

It's a big one. It's a big one.

It's a big one. It's a big one.

It's a big one. It's a big one.

The Dicks and the Dicks
Andrew, Sunday 4 October 2012

Just in
Kris
Lizzy
Maggie

John
The Dicks and the Dicks

Just in
Kris
Lizzy
Maggie

John
The Dicks and the Dicks

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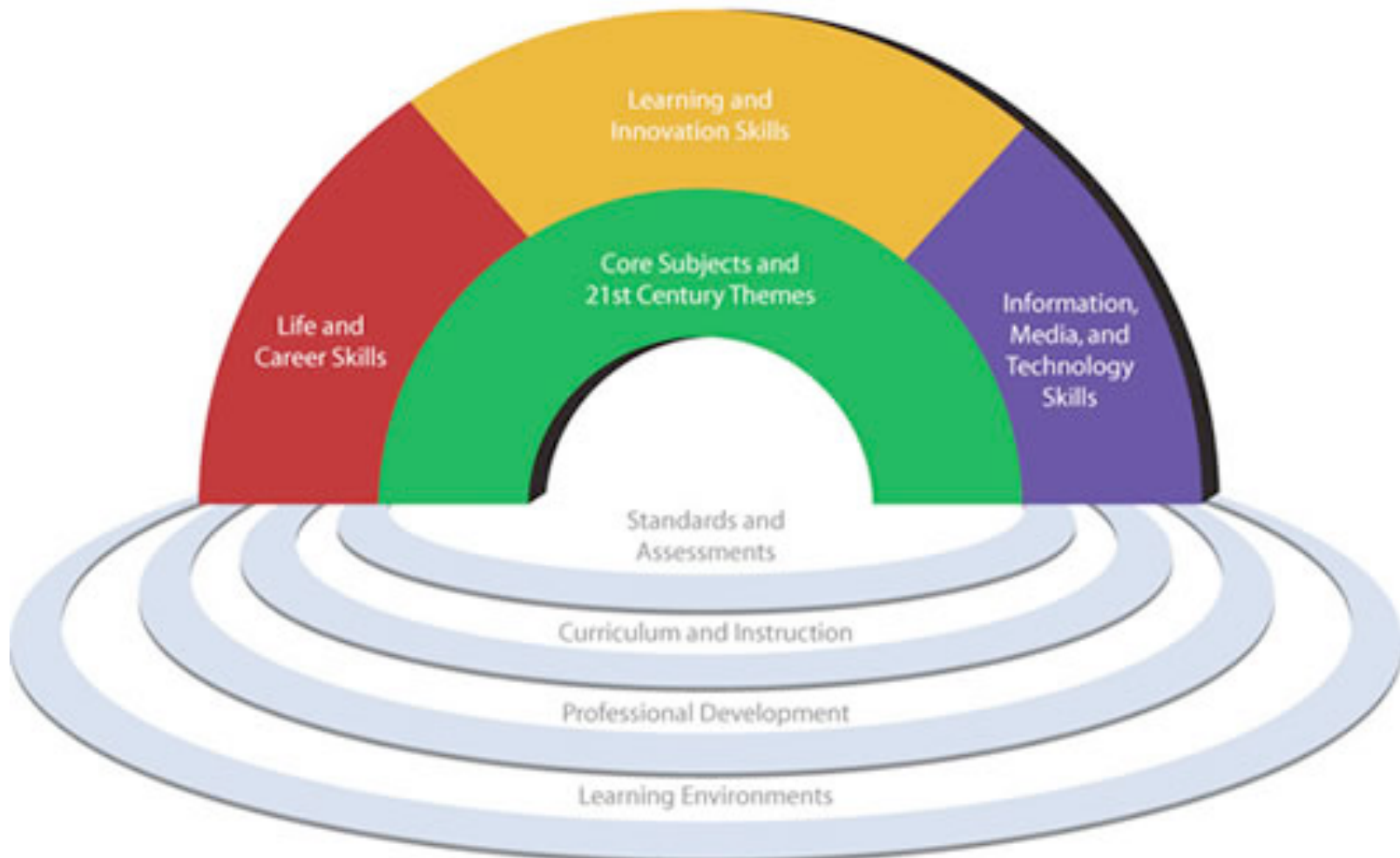
What IS PBL?



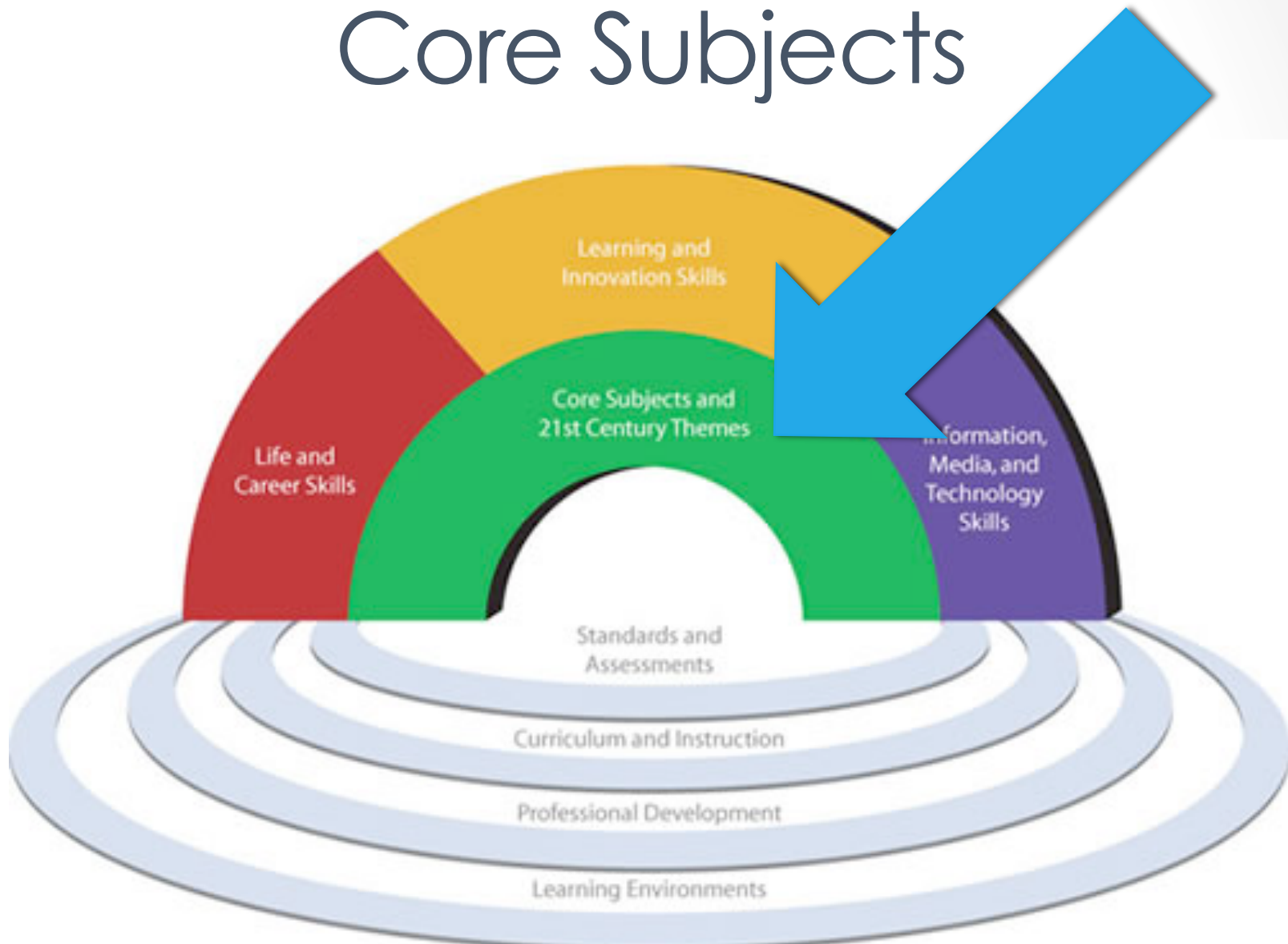


It's messy!

21st Century Skills

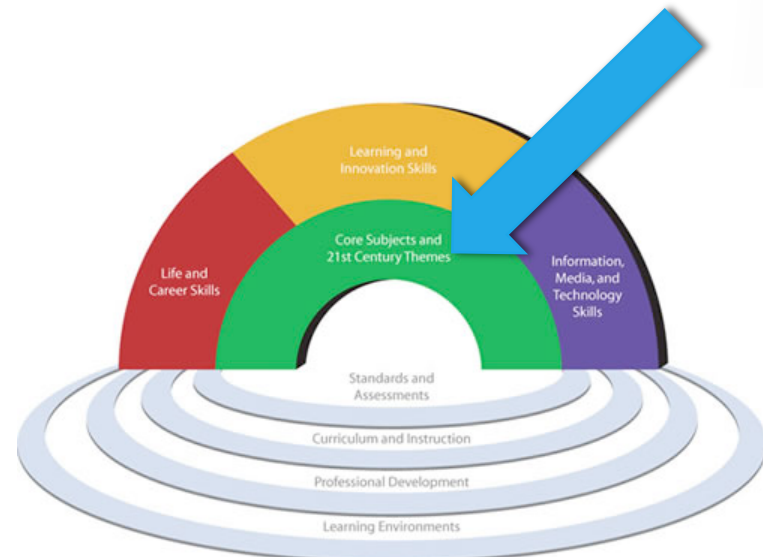


Core Subjects



The Core Subjects & 21st Century Themes

- The “Traditional” 3 R’s
 - Global Awareness
 - Financial, Economic, Business and Entrepreneurial Literacy
 - Civic Literacy
 - Health Literacy
 - Environmental Literacy

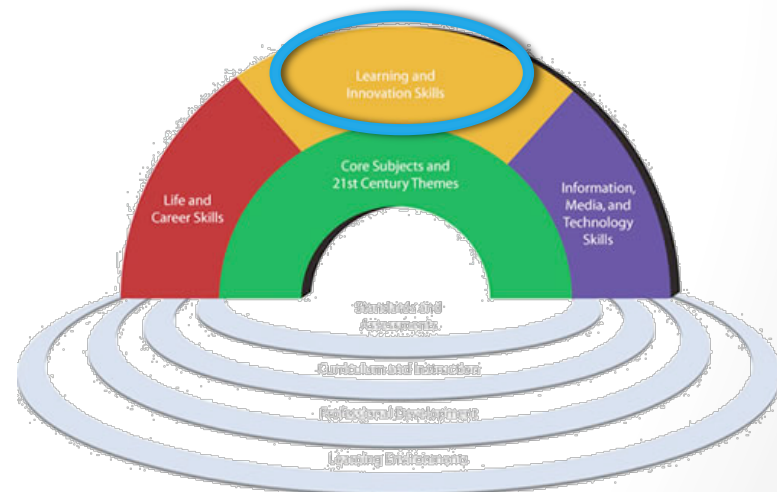


Learning & Innovation Skills

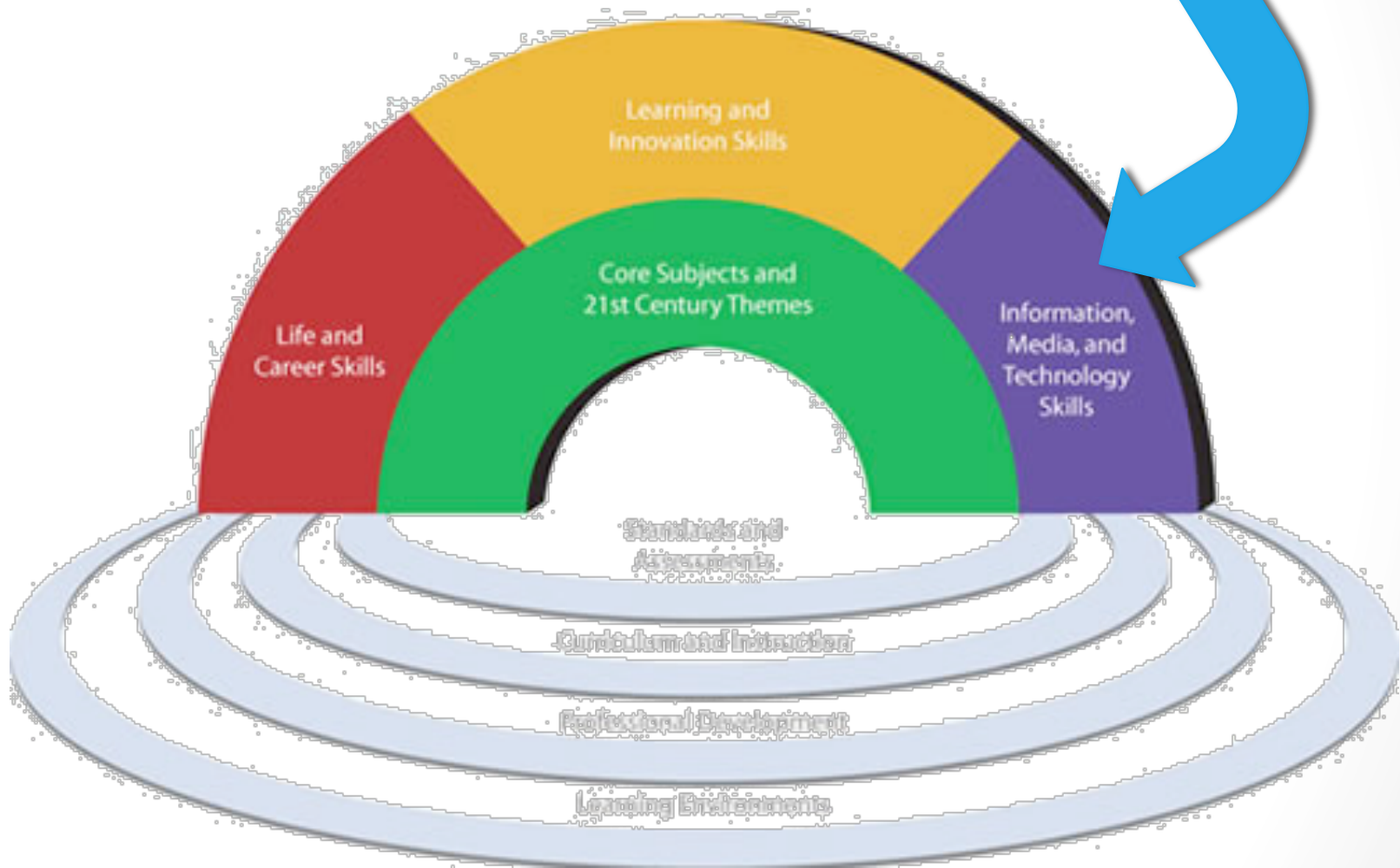


Learning & Innovation Skills

- Critical Thinking
- Communication
- Collaboration
- Creativity

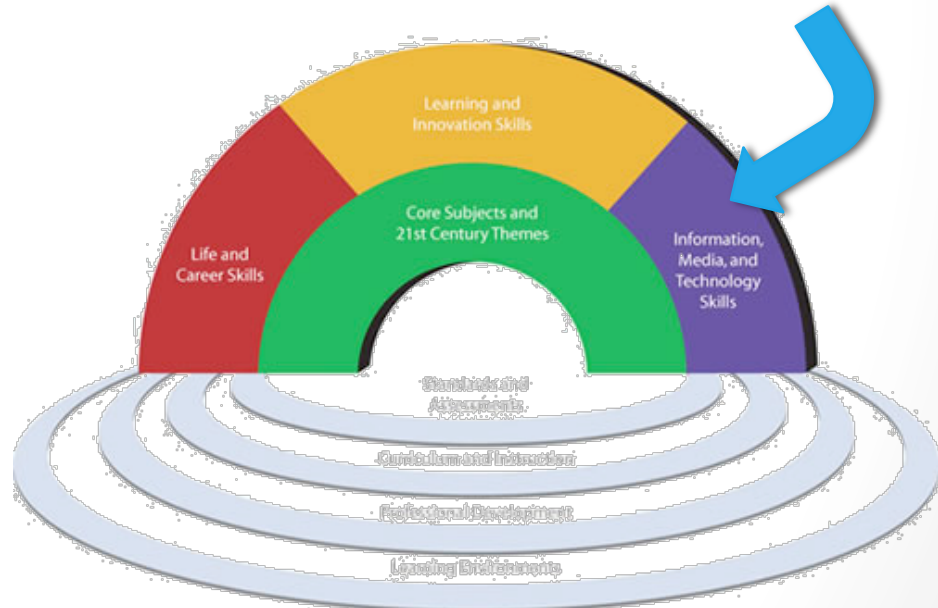


Information, Media, & Technology Skills

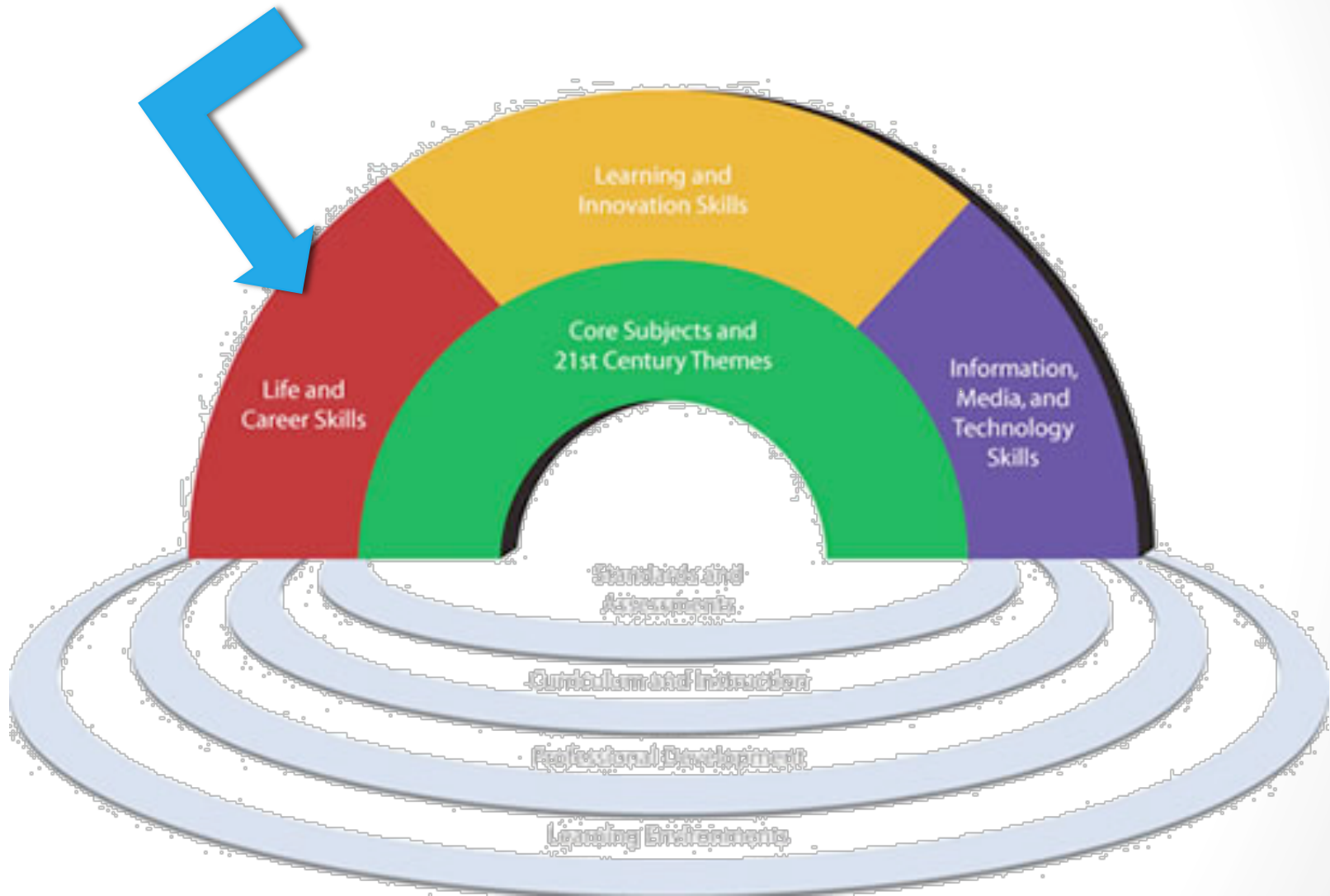


Information, Media, & Technology Skills

- Functional skills
- Critical thinking skills
 - (Related to information, media and technology)

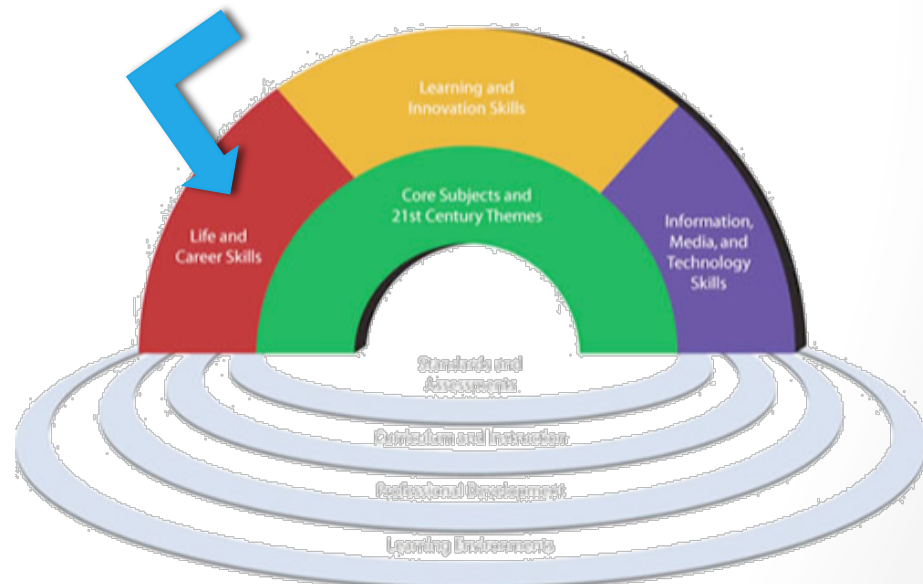


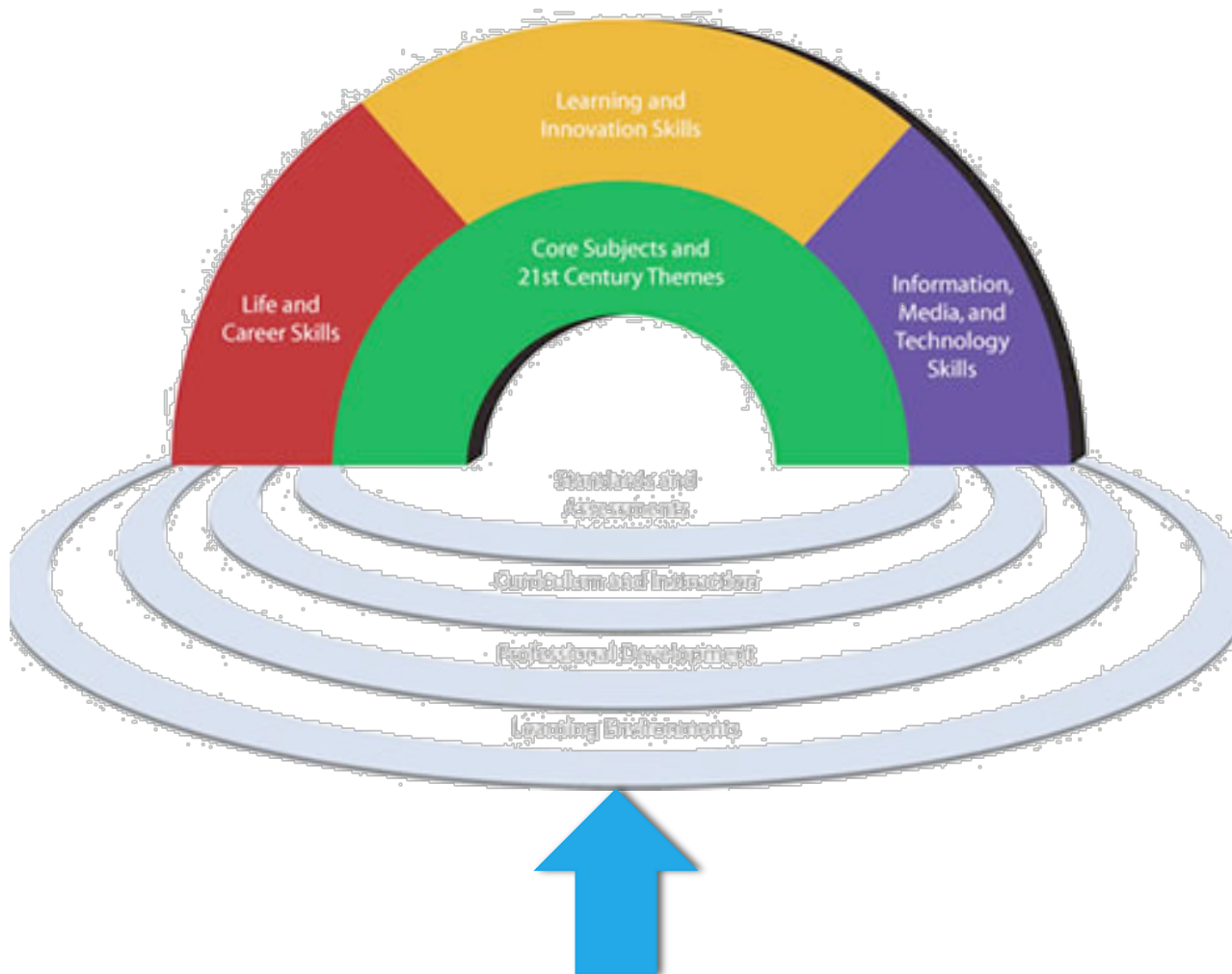
Life and Career Skills



Life and Career Skills

- NOT job training
- Skills for learning, relearning, independence and problem solving

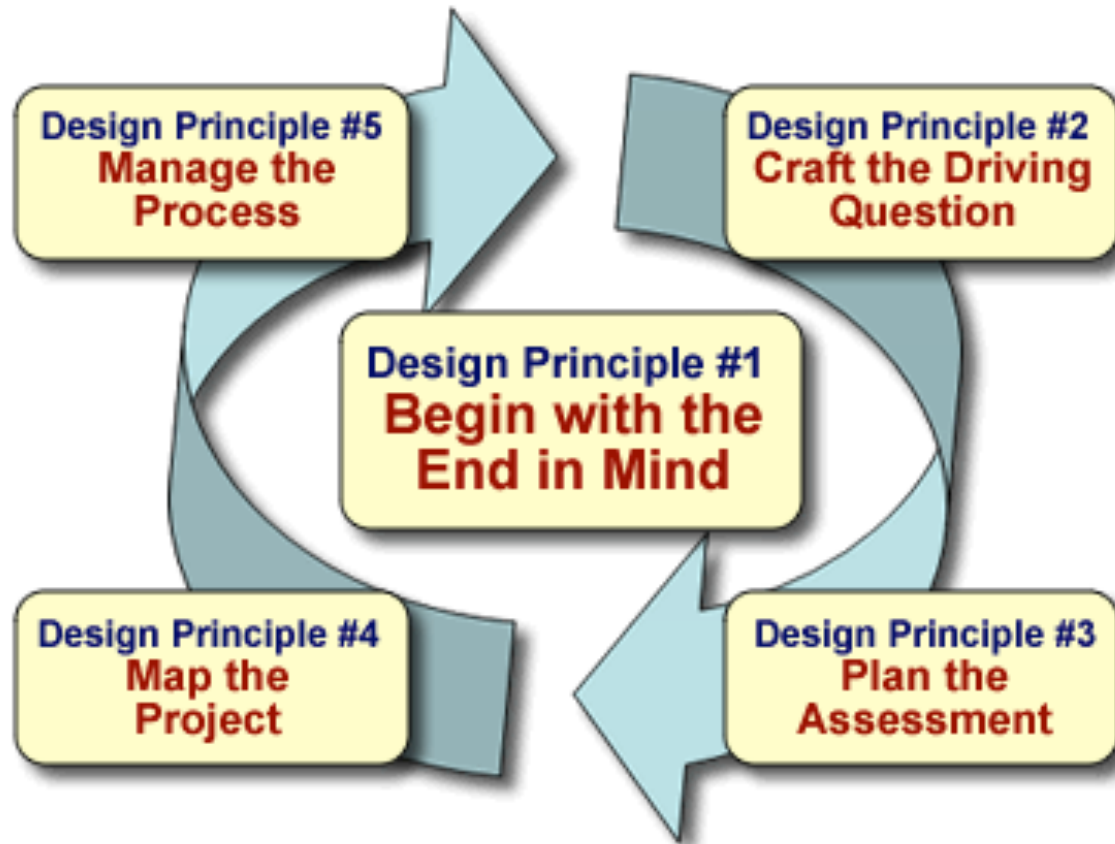




Support Systems

Project-Based Learning Process

- <http://pbl-online.org/pathway2.html>



Project-Based Learning Process

(simplified)

Simplified Process Description:

1. Determine topic(question, problem, or curriculum focus)
2. Decide who will participate
3. Decide when you will do the project
4. Determine tools for the project & publishing the results
5. Find or decide where to find resources
6. Determine how success will be measured
7. START!

Management Hints and Myths



<http://www.edutopia.org/blog/20-tips-pbl-project-based-learning-educators-andrew-miller>

<http://www.edutopia.org/blog/debunking-five-pbl-myths-john-larmer>



Lowered “risks”

READY-MADE PROJECTS

Projects by Jen

<http://www.projectsbyjen.com/calendar.htm>

Projects
By
Jen



 HOME  MAIL  FAQ

Creative Projects for
the PreK - Sixth Grade
Classroom

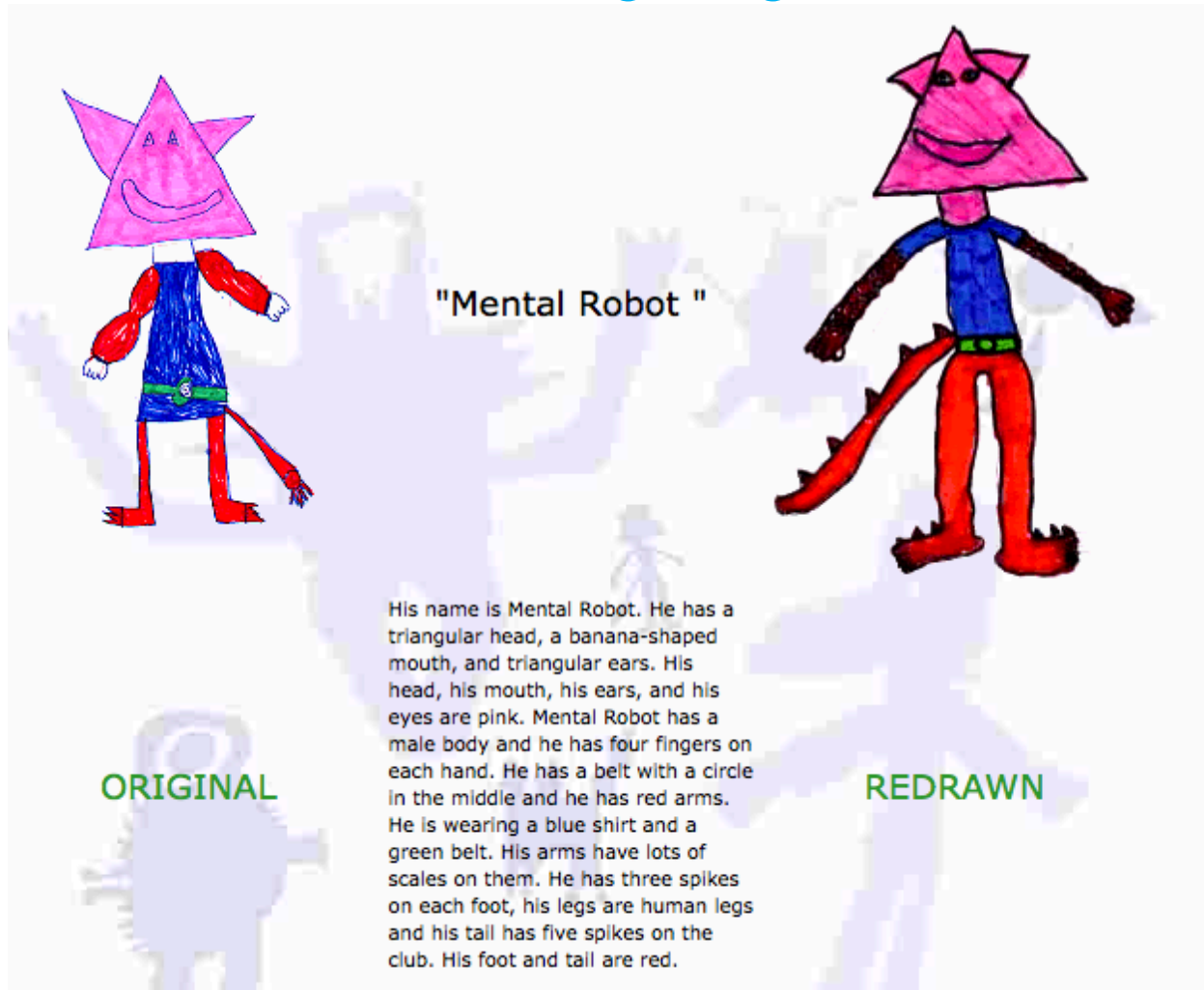
Iditarod – Electronic Project

- <http://surfaquarium.com/elditarod/index.htm>



Monster Project

<http://www.monsterexchange.org/>



Flat Stanley

<http://www.flatstanley.com/>

(also an app on iTunes)


The screenshot shows the Flat Stanley website homepage. At the top is a dark blue navigation bar with the 'Flat Stanley' logo on the left, followed by links for 'Photos', 'Stanleys', 'Explore', 'Resources', 'Books', and 'About'. On the right side of the bar are a 'Send a Stanley' button and links for 'Login | Help | Blog'. Below the navigation bar, the main content area has a blue background. On the left, there's a section titled 'Flat Stanley Goes Mobile' with a 'Get It Now' button and a map showing Stanley's travels. In the center is a large illustration of a mailbox with a letter inside. On the right, there's a 'Login' section with input fields for 'ID or email' and 'password', a 'Sign In' button, and links for 'Forgot Password?' and 'Remember Me'. Below the login section is a 'Not a member?' section with the text 'create an account for free and join the fun today' and a 'Get Started' button. At the bottom, there are two sections: 'Popular Stanley Photos' with a grid of photo thumbnails and a 'More Photos' link, and 'Where in The World is Stanley' with a map showing Stanley's location in Philadelphia and a user profile for 'Danielle' with a timestamp of '4:42am 01/17/2012'.

<http://theglobalclassroomproject.wordpress.com/category/global-classroom/classroom-stories/flat-stanley-project/>

Global Schoolnet

<http://www.globalschoolnet.org/gsh/pr/index.cfm>

INTERNET PROJECTS REGISTRY



PROJECT Registry

This is the original clearinghouse for collaborative projects from across the globe - projects hosted by the Global SchoolNet Foundation, other reputable organizations, and outstanding partner projects conducted by teachers worldwide! Whether you choose to join an existing project or announce one of your own, GSN's Projects Registry promises to save you time!

[Browse new projects](#)


[Add your own project](#)

[Search for projects](#)

[Edit your project announcements](#)

Related Resources

Join or Browse Hilites
Subscribe to our Hilites mailing list to receive these projects announcements in your email as they are posted.

 **Visit our OCL Center:**

Browse Current Projects [top](#)

- There are **5 future** projects that will begin in the coming weeks.
- There are **26 current** projects in progress; **20 of them** are still accepting registrations.
- There are **2582 archived** projects that have been completed.

Browse future/current projects:

☒ 5 future projects

iEarn

<http://media.iearn.org/projects>



Collaboration Centre

[HELP](#) [LOGIN](#) [REGISTER](#)

HOME PROJECTS PEOPLE GALLERY FORUMS

Select Language ▼

PROJECTS

FIND A PROJECT

By Title

By Keyword

By Subject ▼

By Age Level ▼

By Language ▼

Search

[View All Projects](#)

RESOURCES

For more information about getting started in iEARN projects [Click here](#).

iEARN projects are designed and facilitated by educators and students worldwide, and result in a range of collaborative final "products." Below are four examples -- use the **search block** to the left to view all of the currently active iEARN projects!



YouthCaN

Students write about and interact on environmental issues facing their communities during the year. Youth coordinate an annual event in April, where youth of the world share their environmental projects.



Food for Thought

Students research the recipes of typical food dishes in their countries as well as the origin, and the legends and stories behind them. Project activities could include research, discussion, illustration, and production of a book.



Finding Solutions to Hunger

Participants research and discuss the root causes of hunger and poverty in the world and take meaningful actions to help create a more just and sustainable world.



Laws of Life: Virtues

Students write about the rules, ideals, and principles that they value most in life. The essays describe the rules, ideals, and principles by which they live, and explain the sources of their laws of life

We encourage all iEARN teachers and students to participate in existing projects before initiating a project of their own. [Click here](#) to download the complete 2011-2012 iEARN Project Book (pdf). If you are interested in submitting a new project, email projects@us.iearn.org.





The Global Classroom Project

<http://theglobalclassroomproject.wordpress.com/>



ePals Projects

<http://www.epals.com/projects/info.aspx?DivID=index>

ePals Projects				
Project	Topic	Essential Questions	Overview	Community
<p>Holidays and Festivals Around the World</p> 	People and Culture	<ol style="list-style-type: none"> 1. Why do people celebrate? 2. What special traditions and rituals surround holidays and festivals? 3. What holidays and festivals are important parts of your culture? 4. What holidays and festivals are important in other cultures? 5. What do celebrations around the world have in common? 6. What is a symbol? How are symbols used in celebrations and holidays? 	<p>How are special days celebrated throughout the world? Every culture has its own special traditions and reasons for celebrating and in this project, students will learn how holidays and festivals are celebrated all over the globe. Students will explore celebrations, traditions and symbols related to a holiday or festival from their home country and then investigate those from another part of the world. In a culminating activity, students will share their information and create a symbolic representation of their researched holiday from across the globe.</p>	 <p>Connect with Classrooms</p> <p>Student Forums</p> <p>Feedback for ePals</p>
<p>Digital Storytelling</p> 	Culture and Literacy	<ol style="list-style-type: none"> 1. What is digital storytelling? 2. What are the elements of a good story? 3. Why do people tell stories? 4. How is my personal story the same or different from others? 	<p>In this unit, students will learn about the age-old practice of storytelling and use 21st century tools to create their own digital story. Students will explore digital storytelling as a way to tell a story, promote cross-cultural understanding and build meaningful connections with others. Students will participate in an email exchange to discuss the process. They will 1) develop a story topic 2) write their story 3) create or find appropriate images to support their story and 4) share their story and reflect on their work.</p>	 <p>Connect with Classrooms</p> <p>Student Forums</p> <p>Feedback for ePals</p>

Project Search



- http://www.bie.org/project_search



Page 1 of 1 pages

Refine your search:

All Sources Math (145) Elementary (20) GO

PROJECT	SUBJECT(S)	SUMMARY	COMMON CORE STANDARDS
A Gardener's Dilemma West Virginia DOE <i>Beginner</i>	■ Math	Communities set aside plots of land for local citizens to establish small gardens. Students will design a plan for a family garden plot.	PRIMARY: 2.G.2, 3.MD.5, 3.MD.6, 3.MD.7 SECONDARY: 2.G.3, 3.MD.8, 4.MD.3
Connecting Math to Our Lives iEARN <i>Beginner</i>	■ English Language Arts ■ Math	Students learn how math is connected to occupations by interviewing people in their community.	PRIMARY: 4.OA.1, 4.OA.2, 4.OA.3, 4.W.1 SECONDARY: 5.RI.5, 4.RI.7
Courtyard Re-Design <i>Beginner</i> 	■ Arts ■ Math ■ Science	Students from Schenk Elementary School present their finished designs to a group of school architects, planners, & designers. The video also demonstrates teacher planning.	PRIMARY: G.MG.3, 7.G.1 SECONDARY: G.MG.3, 3.G.2, 3.G.1
Custom Cup Coasters West Virginia DOE <i>Beginner</i>	■ Math	Students will create a custom coaster design for a client and pitch the idea to the Design Department Manager of a local firm.	PRIMARY: G.GMD.3, G.MG.3, 8.G.9, 6.G.4 SECONDARY: 7.G.6, 8.EE.8
Elementary Projects from Worms to Wall Street <i>Beginner</i> 	■ Math ■ Science	Newsome Park Elementary students work on a variety of research projects based on their interests.	PRIMARY: 1.MD.4, 2.MD.10, 3.MD.3, 4.MD.4

Some Past Projects

- <http://classroomwindows.blogspot.com/>
- <http://lunchboxproject.wikispaces.com/>
- <http://thebigshoeproject.creativeblogs.net/>

Outside My Classroom Windows: Beirut, Lebanon



Examples (ideas)

- <http://www.plymouth.k12.in.us/1st-grade-pbl.html>
- <http://rooseveltblog.ipage.com/wordpress/1st-grade/>
- <http://kathycassidy.com/category/pbl-2/>
- <http://edt674pbl.wikispaces.com/PBL+K-2>
- <http://www.intel.com/content/www/us/en/education/k12/project-design/unit-plans/grade-index.html#1>

Teachers Looking for Collaborators

Also on Twitter, Facebook, SIG, or Curriculum Specific groups...






TOOLS FOR PBL

Checklists


<http://pblchecklist.4teachers.org/index.shtml>



Project Based Learning

Checklists to support Project Based Learning and evaluation

★ Powered by 4Teachers.org 4Teacher Tools



A project based learning method is a comprehensive approach to instruction. Your students participate in projects and practice an interdisciplinary array of skills from math, language arts, fine arts, geography, science, and technology.

"The collaborative nature of the investigation enhances all of these valuable experiences ... as well as promotes a greater appreciation for social responsibility (Scott, 1994)."

[Building Motivation](#)
[Using Multiple Intelligences](#)

PBL Checklists

To help you start using PBL, we've created age-appropriate, customizable [project checklists](#) for written reports, multimedia projects, oral presentations, and science projects. The use of these checklists keeps students on track and allows them to take responsibility for their own learning through peer- and self-evaluation.

[PBL Project Checklists in English](#)
[PBL Project Checklists en Español](#)

We now have customizable rubrics for multimedia projects, work skills, experiments, oral projects, and many more -- all available at [RubiStar!](#)

PBL Checklists

If you have questions, check out the [FAQs](#).

writing
[K-1](#) [2-4](#) [5-8](#) [9-12](#)

science
[K-4](#) [5-8](#) [9-12](#)

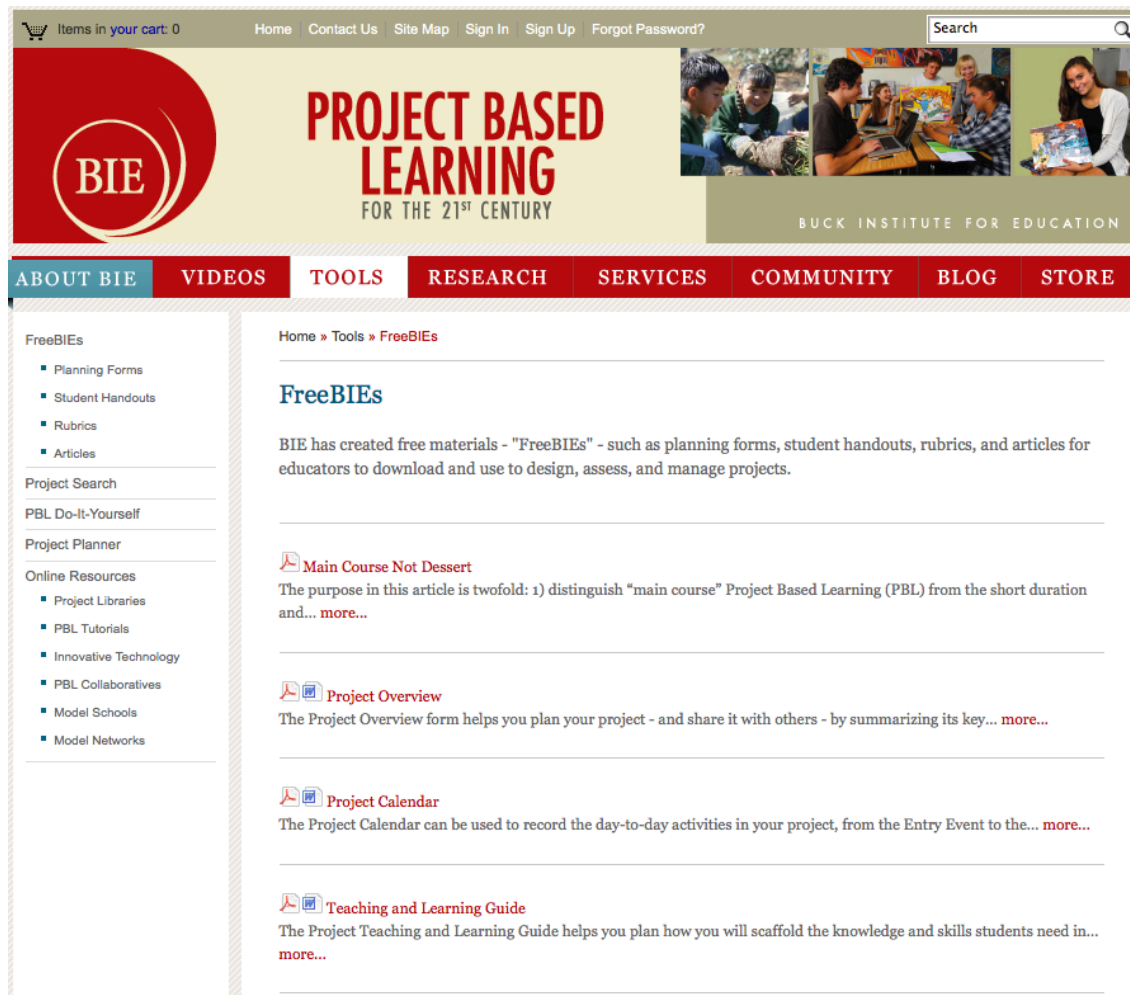
oral presentation
[2-4](#) [5-8](#) [9-12](#)

multimedia
[2-4](#) [5-8](#) [9-12](#)

Completing class projects can be fun for your students, especially if they know exactly what is needed. Creating guidelines can be time-consuming though, so we've made a way for you to do it in no time! To make a project checklist for your students, first choose the grade level for the type of project you want your students to do. You can choose from writing, presentation, multimedia, or science projects.

Checklists and MORE

<http://www.bie.org/tools/freebies>



The screenshot shows the BIE (Buck Institute for Education) website. The header includes a shopping cart icon with 'Items in your cart: 0', navigation links (Home, Contact Us, Site Map, Sign In, Sign Up, Forgot Password?), a search bar, and a large banner for 'PROJECT BASED LEARNING FOR THE 21ST CENTURY' with the BIE logo and a photo of students. Below the banner is a red navigation bar with links: ABOUT BIE, VIDEOS, TOOLS, RESEARCH, SERVICES, COMMUNITY, BLOG, and STORE. The main content area is titled 'FreeBIEs' and lists several resources:

- FreeBIEs**
 - Planning Forms
 - Student Handouts
 - Rubrics
 - Articles
- Project Search
- PBL Do-It-Yourself
- Project Planner
- Online Resources
 - Project Libraries
 - PBL Tutorials
 - Innovative Technology
 - PBL Collaboratives
 - Model Schools
 - Model Networks

The 'FreeBIEs' section is further detailed with the following items:

- Main Course Not Dessert**
The purpose in this article is twofold: 1) distinguish "main course" Project Based Learning (PBL) from the short duration and... [more...](#)
- Project Overview**
The Project Overview form helps you plan your project - and share it with others - by summarizing its key... [more...](#)
- Project Calendar**
The Project Calendar can be used to record the day-to-day activities in your project, from the Entry Event to the... [more...](#)
- Teaching and Learning Guide**
The Project Teaching and Learning Guide helps you plan how you will scaffold the knowledge and skills students need in... [more...](#)

Rubric Maker: Rubistar

<http://rubistar.4teachers.org/>

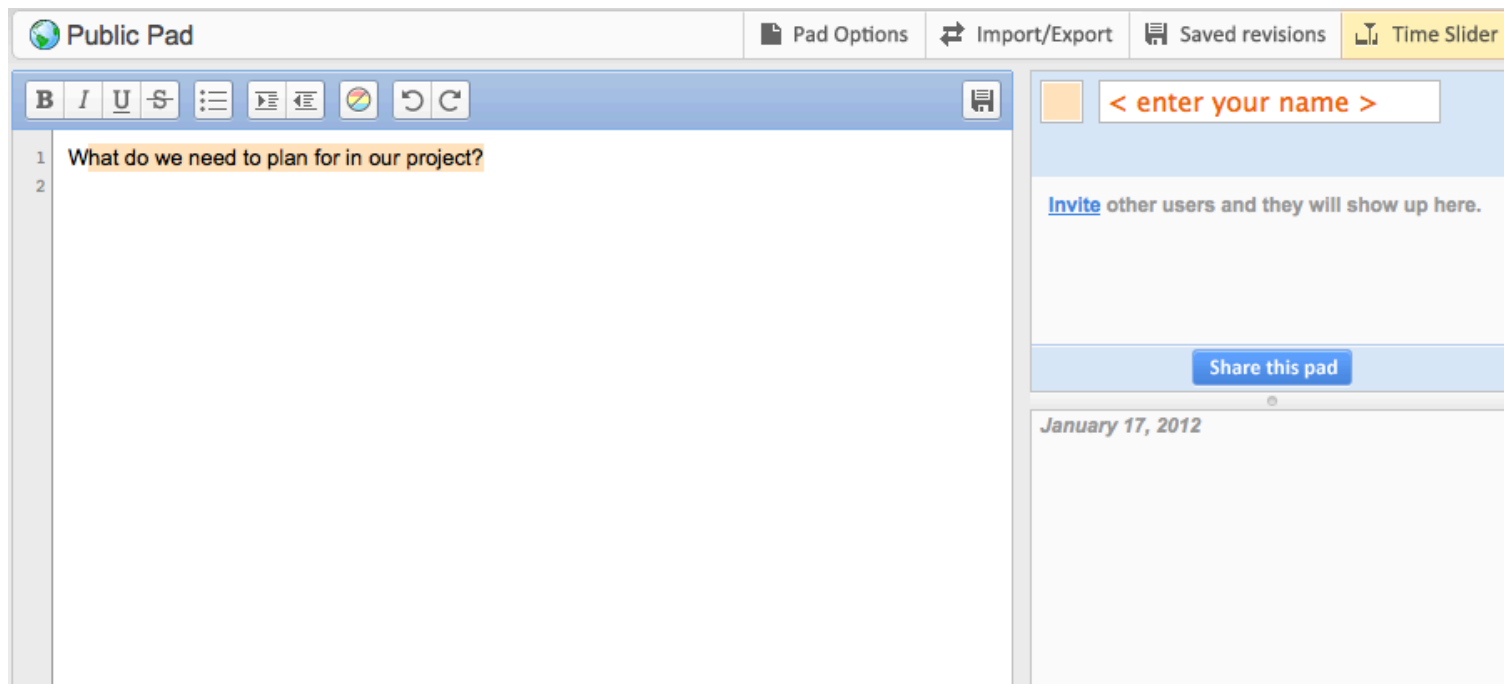
Creating and Editing Your Rubric

Here are some quick steps to help you create your rubric. [hide/show](#)

Category:	4	3	2	1
<div>Sentences & Paragraphs ▾</div> <div> If you don't like the text in the box above, you can use the text box below to rename a category or type in a new category name. <input type="text"/></div> <div>You may add or modify content in the rubric text boxes to the right:</div>	<div></div> <div>Reset</div>	<div></div> <div>Reset</div>	<div></div> <div>Reset</div>	<div></div> <div>Reset</div>
<div>Sentences & Paragraphs ▾</div> <div> If you don't like the text in the box above, you can use the text box below to rename a category or type in a new category name. <input type="text"/></div> <div>You may add or modify content in the rubric text boxes to the right:</div>	<div></div> <div>Reset</div>	<div></div> <div>Reset</div>	<div></div> <div>Reset</div>	<div></div> <div>Reset</div>

Shared Documents

- <https://docs.google.com>
- <http://titanpad.com>
- <http://stixy.com>



Wikis and Websites

<http://wikispaces.com>

<http://Yola.com>

☆ home

Edit 1 0 105 ...

Mrs. Cassidy's Grade 1/2 Dinosaur Wiki

We are learning about dinosaurs. Do you know something about dinosaurs that you could add to our wiki to help us learn?



Velociraptor

('swift thief', 'swift plunderer' or 'swift bird of prey')

The velociraptor was a small dinosaur!! It ate meat. The fossils were found in Central Asia. They hunted in packs. It was 2 feet tall, 6 feet in length and 30 pounds in weight. **It had more killing power than almost** any other dinosaur of its weight. They were very intelligent. Velociraptor had approximately 80 conical, curved teeth, with long, flattened snout. Its teeth measured about 2.5 centimeter long. Its head was approximately 18 centimeters long. Its neck was S-shaped. This dinosaur had long, slender legs with four-toed clawed feet. Its arms had three clawed fingers.

Velociraptor was known to have existed during the late cretaceous period, approximately 80 to 85 million years ago. It was believed to have inhabited warm, arid environments, almost desert-like with rivers or streams.

The Velociraptor was between 5 to 6 feet long, and about 2.5 to 3 feet tall. It

weighed around 15 to 40 pounds (weights of dinosaurs are very hard to estimate).

Physical Description:

The Velociraptor had an s-shaped neck, two arms that had claws with three fingers on each hand, and long thin legs with claws that had four toes on each foot. It's mouth had sharp, curved teeth and it had a really flat long mouth and nose, and a long stiff tail.



Diplodocus

('double beamed')

It has a long neck and a long tail and it has five toes on each foot. It has a long neck. Diplodocus are quadrupeds meaning they stand on all four legs. The dinosaur walked on four legs.

Diplodocus was one of the largest dinosaurs ever discovered.

It was the longest land animal, but not the heaviest. It was a sauropod, a

"lizard-hipped" dinosaur. Diplodocus carnegii was named after industrialist and

Timers and Calendars etc...

- Apps – Timr, Toddler Timer
- Calendars
 - Printable –
 - Use your Office tool templates
- Posters
 - Use Office
 - Use paper and paint?
- Group Pickers etc...



Scaffolded Research

- http://www.davidson.k12.nc.us/education/components/scrapbook/default.php?sectiondetailid=24136&sc_id=1168360267

First grade PBL and Unit topics

North Carolina Animals

[Red Wolf](#) / [Wild Turkey](#) / [Bobcat](#) / [Honey Bee](#) / [Box Turtle](#) /

Red Wolf

<http://www.nhptv.org/natureworks/redwolf.htm>

http://www.worldalmanacforkids.com/W_AKI-ViewArticle.aspx?pin=wwwwak-178&article_id=67&chapter_id=1&chapter_title=Animals&article_title=Wolf

Wild Turkey

<http://www.nhptv.org/natureworks/wildturkey.htm>

<http://www.switcheroozoo.com/profiles/wildturkey.htm>

<http://www.sheppardsoftware.com/content/animals/animals/birds/turkey.htm>

<http://www.saskschools.ca/~gregory/thanks/wildtky.html>



OUR PROJECT!

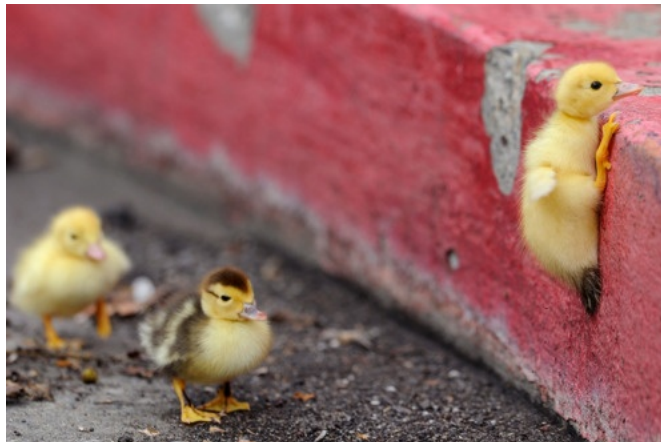
[http://thedivineedge.wordpress.com/
2013/01/09/random-acts-of-kindness/](http://thedivineedge.wordpress.com/2013/01/09/random-acts-of-kindness/)

Random Acts of Kindness Week

- February 11-15
1. What acts of kindness might we (first graders) be able to do?
 2. Related activities which are curriculum-rich.
 3. Make a plan... how will you and your students know they were successful?

Some related resources

- <http://ayearofmanyfirsts.blogspot.com/2012/12/random-acts-of-kindness-free-packet.html>
- <http://www.randomactsofkindness.org/>
- <http://www.foundthemarbles.com/2012/02/acts-of-kindness-for-kids/>
- <http://kindertastic.blogspot.com/2011/12/light-em-up-random-act-of-kindness-for.html>



Leaders in PBL



PBL Go-To Leaders Online

<http://www.edutopia.org/project-based-learning>

<http://pbl-online.org/>

PBL Specific Tools

<http://www.bie.org/>

<http://www.edutopia.org/blog/project-based-learning-elementary-classroom-john-larmer>

Blogs by PBL Experts

<http://biepbl.blogspot.com/>

[http://educationaltechnologyguy.blogspot.com/
search/label/PBL](http://educationaltechnologyguy.blogspot.com/search/label/PBL)

[http://www.edutopia.org/going-global-rural-
washington-students-connect-with-world](http://www.edutopia.org/going-global-rural-washington-students-connect-with-world)

[http://www.edutopia.org/blog/real-world-projects-
news-events-suzie-boss](http://www.edutopia.org/blog/real-world-projects-news-events-suzie-boss)

Research and Examples

<http://www.edutopia.org/project-based-learning-student-motivation>

http://www.wested.org/pblnet/exemplary_projects.html

<http://edupln.ning.com/group/pbl>

<http://www.classroom20.com/>

Comes down to this...

OWNERSHIP is key.

Although you give the assignment, the students are in charge the rest of the way.

- Technique
- Structure
- Audience
- Tools
- Media

Comes down to this...

CREATIVITY is the another major part of the PBL and is closely linked with **OWNERSHIP**.

Allowing the students to create gives them a bigger sense of **OWNERSHIP**.

Comes down to this...

Another part of the PBL is the **COLLABORATION**. Students working with each other trying to decide the best plan of attack, the best next step, the best way to share with their audience. They **OWN** the process and product as a group.

Comes down to this...

Depending on how you set up your project, **CRITICAL THINKING**, should also be an important part of PBL. PBL is a great way to get kids thinking critically about purpose, problems, audience and process as well as content.

Comes down to this...

REFLECTION, is absolutely critical and should happen on an ongoing basis. Without **REFLECTION** much of what is learned is lost. Part of the **COLLABORATION** is about opportunities for **REFLECTION**.

John Dewey said “ We don’t learn from experience, we learn from reflecting on experience.”

Comes down to this...

Project Based Learning has to be **FUN**! It seems obvious, but I have seen many projects that are very tedious. They have kids go through the motions and leave very little room for **FUN** or **CREATIVITY**. The **FUN** comes from the freedom students feel. Working with their friends (**COLLABORATION**), taking charge of their learning (**OWNERSHIP**), solving real problems (**CRITICAL THINKING**) and allowing students to create (**CREATIVITY**) all lead to the students learning in a **FUN** environment.

What will you do next?



It is ALL up to YOU!