

# Project Based Learning In Mathematics

## Road Map

This is the “ **Yellow Brick Road** ” to follow for successful completion of this course. It is an overview of what is coming each week. Be sure to check the map to see what you are expected to do each week.

## Week 1: The Beginning Of The Road

Objective	Activity	Resources/Readings	Assessment	Time
Participants will learn how to navigate the MarcoPolo web sites and use the MarcoPolo search engine	Explore the Illuminations, Science NetLinks, and MarcoPolo New York web sites and experiment with the search engine	MarcoPolo web site with links to Illuminations, Science NetLinks, and search engines: <a href="http://www.mped.org">www.mped.org</a>  MarcoPolo New York web site: <a href="http://www.nyiteez.org/MarcoPoloNY">www.nyiteez.org/MarcoPoloNY</a>	Post comments in Item: <b>I've Seen MarcoPolo</b>	Optional
Participants in the course will learn something about each other as an "Ice Breaker" for discussion	Create an Electronic Name Badge		Post a note in Item: <b>Electronic Name Badge</b>	0.5 hours
Participants will learn to use the MarcoPolo search engine to find interdisciplinary lesson plans, web sites, and other activities related to their grade level Math curriculum	Scavenger Hunt to locate Math materials using MarcoPolo partner sites and MarcoPolo New York	Same as above	Post answers in Item: <b>I Found Some Good Math Stuff</b>	2.0 hours

## Week 2: The Topic For My Project Is...

Objective	Activity	Resources/Readings	Assessment	Time
<p>Participants will learn how to integrate the MarcoPolo lessons, activities, interactive applets, and related web sites into their Math curriculum and their own lesson plans</p>	<p>Answer questions relating to integrating the materials found in the Scavenger Hunt into your existing Math lessons</p>		<p>Post answers in Item: <b>Fitting The Stuff Into Your Curriculum</b></p>	<p>1.0 hours</p>
<p>Participants will read current research about Project Based Learning</p> <p><b>continued on next page</b></p>	<p>Read five (5) articles on Project Based Learning</p>	<p>1. Project Based Learning overview:  <a href="http://www.bie.org/pbl/index.php">http://www.bie.org/pbl/index.php</a></p> <p>2. Project Based Learning:  <a href="http://www.rmcdenver.com/useguide/pbl.htm">http://www.rmcdenver.com/useguide/pbl.htm</a></p> <p>3. Evaluation Of Project Based Learning:  <a href="http://pblmm.k12.ca.us/PBLGuide/pblresch.htm">http://pblmm.k12.ca.us/PBLGuide/pblresch.htm</a></p> <p>4. The Project Approach:  <a href="http://www.project-">http://www.project-</a></p>	<p>Post comments in Item: <b>I Did The Reading</b></p>	<p>0.0 hours</p>

		<a href="http://approach.com/definition.htm">approach.com/definition.htm</a> 5. Project Based Learning: What Is It?: <a href="http://4teachers.org/projectbased">http://4teachers.org/projectbased</a>		
Participants will choose a unit and specific topic from their Math curriculum to create a project for	Choose a unit and specific topic from the Math curriculum		Post a note in Item: <i>Here's My Topic</i>	0.5 hours
Participants will list the objectives for the project and the standards that will be addressed	Create a list of measurable objectives for this project, and list the standards to be addressed by the project		Post the lists in Item: <i>Here Are My Objectives And Standards</i>	0.5 hours
Participants will determine how the Internet will be used to help create this project	Create a list of the Internet resources used to help create this project  Create a list of Internet resources that can be used by students working on this project		Post the lists in Item: <i>How The Internet Was Used</i>	0.5 hours

## Week 3: What Your Students Need To Know

Objective	Activity	Resources/Readings	Assessment	Time
Participants will develop a plan for a project related to the chosen topic	Write a description of the project and how it will be done		Post the plan in Item: <b>Designing The Project</b>	4.0 hours
Participants will design a handout for students to follow in order to successfully complete this project	<p>Create a handout for students to follow that will guide them from the beginning to successful completion of this project</p> <p>Include all necessary instructions for students to follow in a step-by-step guide</p>	See sample project handout for students	Post a note and attach the handout in Item: <b>This Is How They Will Do It!</b>	1.0 hours

## Week 4: Assessing The Projects

Objective	Activity	Resources/Readings	Assessment	Time
Participants will read current research about Creating and Using Rubrics	Read three (3) articles on Creating Good Rubrics	1. Rubric on Writing Good Rubrics: <a href="http://www.mich.com/~osborne/Rubrics_on_Good_Rubrics.html">http://www.mich.com/~osborne/Rubrics_on_Good_Rubrics.html</a>  2. Creating Rubrics: Tools You Can Use: <a href="http://www.education-world.com/a_curr/curr248.shtml">http://www.education-world.com/a_curr/curr248.shtml</a>  3. Creating Rubrics: <a href="http://www.cwcboe.org/creating_rubrics.htm">http://www.cwcboe.org/creating_rubrics.htm</a>	Post a note in Item: <b>I Did The Reading</b>	0.0 hours
Participants will develop a Rubric to be used for grade students' completed projects	Create a Rubric to be used as a guide for grading the completed projects		Post a note in Item: <b>Designing The Rubric</b>	2.0 hours
Participants will design a Rubric handout for students to follow in order understand what is expected - the grade	Create a handout of the Rubric for students to follow as they work on the project	See sample rubric handout for students	Post a note in Item: <b>How Did They Do?</b>	0.5 hours

## Week 5: The Teacher Needs A Plan

Objective	Activity	Resources/Readings	Assessment	Time
Participants will develop a teachers' guide for using the project	<p>Develop a guide (plan) for teachers to be able to use this project with their students</p> <p>Include objectives, standards, and complete procedures to follow</p>		Post a note in Item: <b>A Plan For The Teacher</b>	1.0 hours
Participants will develop a handout to enable teachers to use the project	Create a handout to enable teachers to use this project with their students		Post a note in Item: <b>Teachers' Guide</b>	0.5 hours

## Week 6: The End Of The Road!

### Putting It All Together

Objective	Activity	Resources/Readings	Assessment	Time
Participants will make any needed revisions to the Student Handout, Rubric, and Teachers' Guide and submit the project	<p>Make final revisions to the three documents that make up the final project:</p> <ol style="list-style-type: none"> <li>1. Student Handout</li> <li>2. Grading Rubric</li> <li>3. Teachers' Guide</li> </ol> <p>Submit the final version of the project</p>	<p><b>Note:</b> Each of the three documents must be the final revised version, in classroom-ready, reproducible format</p> <p>Each should be a Word document to attach</p>	Post a note and attach the three final documents in Item: <b>Here It Is, My Project Is Done</b>	1.0 hours
Participant evaluation of the course	Submit course evaluation	Use the link found in the assignments	Post a note in Item: <b>I Completed The Evaluation</b>	0.0 hours

***This is it... Congratulations***

If ALL your work has been submitted properly then you have successfully completed the course.  
Thank you for participating in Project Based Learning For Math