

Introduction

There is a wealth of valuable educational resources on the world wide web. For the past five years I have been maintaining a list of math web sites on my own Homepage for New Math Teachers and in the past three years I have created two or three lessons on math for my eighth graders where they have to use the internet as a resource. The success of those few lessons became the basis for this sabbatic project. I noticed that my students were eager to read material on the web and that they paid closer attention to the questions being asked. I could combine reading and writing into my math class and increase their critical thinking while enriching many of my math lessons. Most students love to use computers. Those who at first seemed reluctant (some had no access to computers at home and were scared) eventually began to become at ease with the experience and wanted to do more.

This handbook contains math and science internet lessons from grades 5-9. I have sorted the lessons by grade level, but many of the lessons can be used in more than one grade. Communicate with your department as to which lessons you intend to use so that teachers from different grades don't use the same lesson. The lessons were designed to be used in a computer lab. They can also be used for extra credit projects. They may be used right in the classroom if you have a computer with a video projector. They can be used by parents to help their students do math over the summer! Feel free to adjust any lessons to fit your students' needs.

Creating an internet lesson takes time. Surfing the web itself takes the most time (especially since I can't get Roadrunner in Trumansburg, NY.). Sites come and go and often a lesson created can no longer be used because the site has disappeared from the web. This workbook, which is the product of many long hours during my sabbatic (Spring 2001), contains web sites that I know have been on the web for at least several years and that load quickly. I have used several web guides including sites recommended by Classroom Connect (<http://www.classroom.com>).

I have combined this project with a special web site where you can also download the lessons from home. You need to get free Acrobat Reader. The URL where you can download all the lessons is:

<http://people.clarityconnect.com/webpages/terri/lessonspdf.html>

I have also created a second web site where you have all the links needed for any of the lessons. This is to help the students who have trouble typing the entire URL, although that is also a learning experience. The URL for students to find all the links to each lesson is:

<http://people.clarityconnect.com/webpages/terri/internetlinks.html>

You can click on <http://newmathteacher.com> which is faster and find both of the

links I just mentioned right on the main page of my web site.

Each lesson has an answer key but I've chosen not to put the answer keys on the web to prevent students from downloading those in case you want to grade the lessons.

If you are interested in creating your own lessons, a list of valuable sites can be found at <http://newmathteacher.com> then click on SITES.

The success of this project depends in part on the speed of your school's network, but as the technology improves in our schools, more and more teachers will find that the internet is a great teaching tool.

Please study the guidelines for how to use the internet in your classroom. Also, please read the Note to the Teachers before each lesson. There, I list the skills practiced and the New York State Standards that are met by each lesson.

Using the internet is not meant to replace what a good teacher does in the classroom. It is not intended to eliminate the use of books as a resource in any classroom! Using the internet in the classroom provides more enrichment, allows students to get immediate feedback on interactive sites, helps them to practice reading and following directions, helps them to search for a wealth of information, and ultimately encourages students to love learning and to see technology as a tool to their learning.

I hope this workbook will be a great resource to enrich your curriculum and that my lessons may in turn serve as examples of other lessons you will create for your students and share in your school.

