

# Rick's Place

## Notes, Thoughts, and Random Musings on the Online Experience

by Rick Hein, AMIS web master

Mathematics is a creative art under constraints - like writing poetry or playing the blues. Mathematicians are bound by the logical steps they must take in crafting their proofs. Yet within such constraints there is still a lot of freedom. Indeed, the beauty of creating under constraints is that you get pushed in new directions and find things you might never have expected to discover unaided.

Alex du Sautoy, *The Music of the Primes*

Welcome back! By now you have met your students and become more aware of all the new opportunities and constraints the new school year holds. We teachers have every sympathy with the sentiments expressed in the above quote. Stravinsky is quoted as saying that great art comes from constraint. Whether it is the constraint of major or minor keys, the skill levels of the musicians, or the instrumentation we are used to coping with constraint.

One of the ways of coping with constraint is using technology to help us stay organised. One use of a computer is as a digital assistant. This tool can help us in our writing, photography, filing, planning, and record keeping. Today's computers are faster, smaller, and better value for money than ever. The user interface is much less intimidating and the applications do more and more for you.

In the latest incarnation of the Apple operating system OSX applications for creating the Digital Hub for your life - Photo, iTunes, iCal, iMovie, and iDVD are included. Plug your digital camera into the computer and iPhoto launches. Click a button and the computer will automatically download the pictures from your camera into the computer. It will even erase the memory card, for you. Drag a group of photos to the album list, and they are turned into picture albums. These albums can be turned into slide shows complete with music from your iTunes library, web pages, prepared for E-mail, or burned to a compact disc.

Using the same kind of automated drag-and-drop interface, you can organise your compact disc library; create playlists; burn compact custom cds or transfer files to your MP3 player. Don't be surprised to hear that your digital video camera can be plugged into the system and your home movies (or rehearsals) edited, enriched with transitions and special effects. Your digital photos or art work created or scanned in from any program that can create a .jpg, can also make an appearance in the film. For the final touch, the "final multimedia cinematic event" can be burned on to a DVD and played on any DVD player in the world.

Sounds great, doesn't it? Gather all that material you've used to teach American folk songs: the album covers (remember those?), cds, tapes, pictures, ticket stubs, guitar pick, and every other culturally loaded artefact. Record your lecture or annotative comments, order everything in iMovie and create a multimedia masterpiece that will knock your students collective socks off, year after year.

Spotted the constraint yet?

Let's start with the big one - time. Just like any other performance, you know that we are talking about a minimum of an hour of preparation for each minute that final performance runs. For a very long ten minute multimedia presentation, that means plan for at minimum 15 hours of assembling and detailing. This summer at the Apple Teacher Institute in Scotland our group created a two minute and six second film mixing video, stills, and animation. No spoken narrative and we used pre-existing royalty free music. Total time from idea to finished project handed in? - nine hours, including 30 minutes for lunch. That also doesn't take into account the variations you put in your presentations from year to year, modifying them to fit the current theme, newer material, and the other constraints of the classroom environment.

Enjoy your year. Let technology be your servant, not your master. Make music and let everyone enjoy their role in our more traditionally recognised creative art.