

KESAB PATAWALONGA AND TORRENS WATERWATCH ON-LINE RESOURCE DEVELOPMENT

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In this age of dwindling resources (mostly financial) and increasing demand, it is getting harder and harder to support all teachers requesting assistance. However, hope does lie in our ability to reach wide audiences through the use of the internet.

This presentation demonstrates some of the recent resources produced by KESAB Patawalonga and Torrens Waterwatch. These resources are designed to enable teachers to undertake their own activities, with minimal additional input from Waterwatch staff.

BACKGROUND

Before we had our own website, KESAB Patawalonga and Torrens Waterwatch produced a folder of resources that was sent out to all schools in our catchment areas. It was our intention to then post out updates of sections when they were made so that teachers could replace the older versions in their folders.

We found a number of problems with this process, chiefly:

- the cost of production and distribution of materials and updates to all schools
- the logistics of producing and distributing the updates
- the inability to track the use of updates and ensure newer versions would be used
- ensuring that resources were still available to a school if a teacher left.

With the development of our website (www.cwmb.sa.gov.au/kwc), and its continual improvements, we are able to reduce these problems. We have reduced publication and distribution costs by only posting out resources and updates when they are requested – we try to direct teachers to download them from the website, where possible.

Updates can be made and uploaded to the internet very quickly, so that the newest versions are always available. Although we cannot guarantee that the new versions are being used by the teachers, we can track the number of times the documents are accessed and downloaded. As the documents remain on the website until they are superseded, resources are always available to schools and any teacher can have his/her own copy of them.

In addition, the website allows us to produce a range of different resources and activities that would be hard to deliver in a standard hardcopy format. The website acts as a storehouse where interested visitors can access information about our program and all of our sessions (including curriculum resources, newsletters, feedback and water quality results) and use our interactive activities, worksheets and other information.

RECENT UPDATES

We have recently been through the process of updating our entire website. This has involved ensuring all pages have the same style and format (text, links, graphics etc). In most cases, language is at an upper primary school level, unless specific resources demand otherwise – eg secondary school activities etc.

We have also tried to ensure that all links are working properly and have uploaded a number of new on-line interactive resources.

Catchment Tour Website

In particular, we have developed a Catchment Tour section that allows teachers (or other community members) to plan their own catchment tour. Photo points and site information of Waterwatch monitoring sites and other places of interest were used as the starting point for the Catchment Tour site information pages.

In the past, we offered schools and community groups tours of the catchment whereby, in discussion with the teachers/leaders, we chose a number of locations that we thought were worth visiting and then developed the itinerary for the whole day – participants arranged their own transport. We met up with them at each of the sites to explore catchment issues and, in many instances, had activities for them to undertake.

However, this planning can take up a lot of time and, in some cases, classes had already visited some of the sites, which meant students were less responsive – often one teacher books a tour on behalf of a number of different classes, some which have already been on field trips.

In addition, there are a large number of sites in the catchment worth visiting, for different reasons, and it is often more appropriate to let the groups pick the sites that fit in best with their current interests, learning topic, lesson plans and/or travel preferences.

Therefore, we developed the on-line catchment tour planner to highlight the different sites in the catchment, allowing the groups to choose their preferred sites and plan their own tour. Waterwatch staff are still available to provide additional information, advice and, if desired, to undertake activities and give talks on site.

The website contains an interactive map showing all of the sites and basic characteristics of those sites. Groups can then select sites of interest to them and click on a site to bring up a separate window giving more detailed information. It is suggested that groups select sites in the upper, middle and lower reaches of a catchment and select sites that include a range of different characteristics (eg wetlands, highly modified habitat, natural habitat, sites with trash racks etc).

The interactive map was created using Macromedia Flash, which is an excellent program for developing this kind of resource. It is also fairly easy to use and, once you get the hang of it, a working application can be prepared in just a few hours. The latest version, Flash MX 2004 (see www.macromedia.com/software/flash/), can be purchased for approximately \$700 (about \$135 for the academic version). I even picked up an older version off a computer magazine bonus disc at no additional charge! Some of the graphics were prepared in Adobe Photoshop (see www.adobe.com/products/photoshop/main.html) and then imported and modified in Flash.

Even though this website was prepared using Flash, it could have been created in standard website HTML using various free software packages available off the internet. It may not appear as 'flash' using HTML, but could be written to perform similar functions.

Wetland Processes Website

Another recent section we have created for the website aims to show primary school students the importance of wetlands and some of the processes that occur in them.

Initially the section was going to use a series of 3 or 4 pictures to demonstrate each process. We then decided to use animations instead - as it was felt that these could provide a better demonstration. What we have settled on is to have both options on the website, so that those with slower or older computers can use the pictures and those with faster computers can have the animations.

The animations cover the four wetland processes of:

- nutrient uptake
- soil sedimentation
- removing pathogens
- removing litter.

The illustrations were originally drawn by hand, scanned onto computer and then coloured using Adobe Photoshop. The Photoshop images were imported into Macromedia Flash, converted to Flash graphics and then animated.

We think that they will provide a fun and easy-to-understand resource for teaching primary and junior primary students the importance of creating and maintaining healthy wetlands in improving water quality.

SUMMARY

In summary, websites can provide a simple and cost-effective method of delivering resources to a wide audience. They can be updated very quickly and can be used to distribute a range of resources from digital versions of standard hard-copy type materials to various interactive hands-on resources.

If you do not feel confident enough to produce websites and animations yourself, there is a range of courses offered through various organisations or people can be engaged to do the work for you. Engaging the services of students and recent graduates could be a cheaper option!