PLAN of ATTACK

Stage 1 - SELECT THE TOPIC

This can come from

1. The Student - AFL, Football, Movies, Pop Songs, Pop Stars.
2. The Teacher - Socratic Philosophy, Musicals, Jazz.
3. The Curriculum - A Study of Ancient Egyptian Civilisation; Mathematics of Pythagoras.
4. The Community - Local community Issue eg. Redevelopment of Local Parklands.
5. The World - SARS, Rainforest Preservation, Theory of Evolution.

Topics will naturally cover a number of subject areas. They need to be authentic tasks in which students can take a personal interest. The key is that they 'matter' or can 'matter' to your students.

Stage 2 - THE BIG SECRET - Gossip

1. Gossip about the topic.
2. Chat
3. Find resources and information and discuss these.

We are teaching - How to develop interests, how to get interested.

People, who are interested in a topic, care about it, it matters to them and they want to know about it. 'Gossiping', or chatting about a topic, is how adults develop their interests, our students can begin to develop this interest in just the same way. Students can resource information using books, newspapers, Internet, DVD's, CD resources, teachers, parents, pictures and other relevant sources, and chat chat chat. (Protocols for productive on task chat will need to be developed).

Stage 3 - SMART QUESTIONS

1. Develop questions about the topic.
2. Discuss and decide on a one main question that you are really interested in answering.
3. Develop sub-questions that will help you answer the main question.

We are teaching - How to ask great questions.

Gossip and decide on the important questions, the SMART questions. It is here that students take charge and ask the questions relevant to them, individualized customized questions about a topic. It is here that authentic multi-disciplinary tasks are developed.

The Question is the Answer

This is the latest greatest statement about technology and future education. Take a moment to think about it!!!!!! In the beginning, children learn by asking questions, firstly by pointing, and then elementary language, their curiosity is endless. Young children are the directors of their own learning. For students to become life long learners it is imperative that students continue to be the directors, and here it is

"the question is the answer." Students need to be given the opportunity to work on their own ideas and ask their own questions, this is the answer to creating life long learners. This is the answer to customized learner centred instruction. With the increased use of the Internet resources, asking good questions is the way through to finding out, discovering and learning. The Internet is expanding and offering online tuition, courses, and even university degrees; it is a huge resource for primary source material, news and all sorts or research information. Effective life long learners, need to be able to pose great questions that provide the answers to their life long curiosity.

SMART Questions

"Questions maybe the most powerful technology ever created." http://questioning.org/

Which questions matter, what is a great question?
The best questions start with :- Why? How? Which?
What does a great question look like?
Great questions reside at numbers V & VI on Bloom's Taxonomy (Bloom; 1954)
They require students to: - Create, design, plan, organize, generate, write, appraise, critique, judge, weigh, evaluate, select.

Here are some examples of great questions: -
Is there a parallel between the spread of the SARS virus in 2003 and the spread of the Bubonic Plague in the 14th Century?
How would we build a sustainable colony on Mars?
Would you rather be the Queen of England or Bill Gates?
Who is the greenhouse monster man or Mother Nature?

"Great questions spark our curiosity and sense of wonder. They derive from some deep wish to understand something that matters to us."
Answers to essential questions cannot be found. They must be invented." http://www.fno.org/
Vol 6, No 1. September, 1996

"Once you have learned how to ask relevant and appropriate questions, you have learned how to learn and no one can keep you from learning whatever you want or need to know."
Neil Postman and Charles Weingartner "Teaching as a Subversive Activity"

Stage 4 - ASSIGNMENT

1. Use various levels of templates, scaffolding, Webquests to assist students.
2. Students work at their own pace and discover the knowledge for themselves.

We are teaching - How to develop a plan, a structure, an outline, a skeleton. How to work strategically. How to be self-directed.

TAMING the Beast

The WWW is huge. There are vast canyons of information, some fantastic, some, biased, some useless junk. So the question is - "How do you use all this information to develop meaningful lessons in the classroom?" Developing a plan or scaffold is the first step toward taming the information beast. The plan is to train students to develop their own scaffolds, initially the teacher can start the ball rolling with the right type of scaffolding.

Using various levels of Templates, Scaffolds and Webquests.

Stage 5 – BRAINSTORM – More Chat, More gossip, More Questions

1. How are we going to work this out?
2. What do we know?
3. What do we need to find out?
4. What strategies can we use?

We are teaching – How to work collaboratively and communicate.

This is a good time to work out exactly what students are trying to achieve.

Stage 6 - ASSESSMENT - Evaluation Rubric

Class, Group or Individual

1. What does it take to do a good/great assignment/presentation/essay?
2. Develop Evaluation Rubric.
3. Discuss performance based assessment and final presentation.
4. Make the learning count.

Here we are teaching - How to develop criteria to self assess.

If students are to achieve their goals they must be able to evaluate their own work. This is a skill that needs to be developed like all others. There are some great Templates for Evaluation and Assessment

Assessment should focus on use of knowledge and complex reasoning rather than recall of facts, multiple-choice questions; 'I Want to be a MIOYONAIRE' type answers are no longer relevant. Real world situations don't come with 4 choices, the fourth one being 'none of the above'.

Evaluation can be tricky. It is easy to mark knowledge-based questions particularly on tests. It is harder to evaluate a movie, a PowerPoint or Keynote presentation or an essay where there is no right answer. If students are creative with their presentations we need to be equally creative with our evaluation. Portfolios are good, evaluation rubrics are a big help.

What are we trying to assess?

Skills like drive, determination, ability to problem solve, leadership skills, the ability to communicate and cooperate in a group, and the ability to apply a concept and show a deeper understanding, are the generic skills that need to be assessed. This can be time consuming. But it is not time wasted; the actual assessment itself is a learning activity for the individual student and probably for the teacher as well.

"Assessment should be deliberately designed to improve and educate student performance, not merely to audit as most school tests currently do."
Grant Wiggins, Ed.D. President & Director of Programs, Relearning by Design, Ewing NJ

Student self-EVALUATION is the key to unlocking the students full potential, by improving self-esteem and self-confidence and building empowered motivated learners. The ultimate goal is to developing students who can realistically assess themselves.

With increase in 'rich tasks' there is a need for much 'richer' forms of assessment, which really capture what the students know.

But don't worry help is at hand. The trick is to set out clearly defined outcomes at the beginning. The Rubric is a cool tool for this. Make your own Rubric, check out Rubrics others have used, ask students to develop their own Rubrics, online or offline. Rubistar is a great online resource. Just select your outcomes and a rating of 1 to 4 for each outcome will automatically appear, change whatever you like and print it out. http://rubistar.4teachers.org/

Digital portfolios are another useful evaluation tool. They demonstrate what students are capable of doing. A future employer can see the evidence of a students knowledge, a student can show what they have done, what they are capable of doing. In the future folk will realise how shortsighted tests are, and there will be a search for something to replace them, Digital Portfolios go a long way to providing this evaluation solution.

We have worked out what we are trying to achieve and the strategies to use, what is the next step:-
"In the future, how we gather, manage and use information will determine whether we succeed or fail." Bill Gates

Stage 7 - WISE GATHERING

1. Use strategies discussed.
2. Research, collect information, use graphs, chart, databases where relevant.
3. Modify strategies if necessary.
4. Chat, discuss, gossip.

We are teaching - How to collect and gather relevant information. How to collaborate and communicate.

When effectively integrated into curriculum, technology tools can extend learning in powerful ways. The Internet and multimedia can provide students and teachers with:
- Access to up-to-date, primary source material. This is crucial, our students need to get that RICH information. Rich authentic information is the fodder for original thinking.

- Ways to collaborate with students, teachers and experts around the world.

- Opportunities for expressing understanding via images, sound and text.

- Just plain fantastic stuff.

Scaffolding, Webquests and templates provide supportive structures that help guarantee students will stay on task and work productively, and have access to high quality information. Initially the Cut and Paste Monster(CPM) will be rampant. I like to think of this as a developmental stage; cutting and pasting is a good skill to master. However, once mastered, it needs to be largely removed from the repertoire. Retrieval charts, databases and great questions tend to reduce the relevance of the monster. There are some wonderful sites that students can use which are reliable and developmentally appropriate.

Finding Brilliant stuff.

Resources
Virtual Teacher has a selection of my favourite sites
http://www.virtualteacher.com.au

And now the fun begins.....

Stage 8 - WRITE, PHOTOGRAPH & EDIT

1. Synthesise, interpret and analyse information in relation to the question. (Bloom Levels V & VI)
2. Develop presentation, writing creatively, developing new ideas creating new knowledge.
3. Chat, discuss, gossip.

We are teaching - How to think and find new solutions.

This is REALLY EXCITING. Here's where all the research and discussion is synthesized into a cohesive form. All the bits and pieces of unconnected information are organized and analysed in relation to the question. This is tough stuff and requires new and original thinking, there are no right answers here. This is cutting edge, scientists, artist, mathematicians all folk who progress human thought and understanding engage in this type of thinking, they do it because it is exciting, it is thrilling to invent new things, to discover new insights, to develop new ideas, and it is no less valid in a Year 3 class at Crown St Public or Year 10 at Rose Bay Secondary College. The teacher is like the 'Socratic midwife/ person' during this faze, asking questions, probing, and asking for clarification, until the delivery of the final PRESENTATION. This requires TIME.

Stage 9 - PRESENTATION

1. Audio–visual, Keynote, PowerPoint, Movie, Published Writing, Website, Performance etc.

We are teaching - How to present information to an audience.

The End Game

After all the work, discussion, preparation, thought, gossip, collaboration, the final presentation is the pay-off. Has the question been answered, has the target audience been 'hit'. Here is the great student motivator, to present their work to an audience, to have their 5 minutes of fame in front of their target audience, be it teacher, class, whole school, email, or in the public arena. To be heard. To receive accolades for their efforts, to sit back and enjoy their own work and realize they have done well. This is authentic and effective feedback. And in the struggle to improve feedback is essential, feedback, feedback and more feedback.

Stage 10 - REFLECTION

1. How well did we solve the problem?
2. Did the group keep on task?
3. Did everyone contribute?
4. How did you feel about your final answer?
5. Rate your work in relation to the assessment rubric

We are teaching - Self-evaluation.

This debriefing session is an important part of the process. Students can evaluate their presentations, recognize their strengths and weakness and plan for improvements next time.