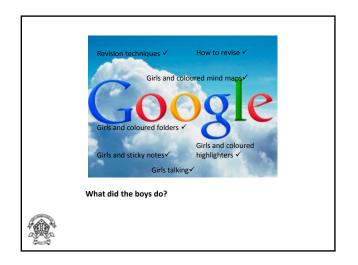




Revision and Differentiation

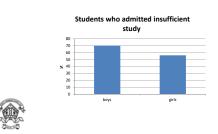
- Engaging targeted students
- Helping students to use different forms of strategic learning
- Giving students a deeper understanding of the ways they learn
- Encouraging teachers to utilise a variety of strategies and resources, particularly when revising work.





Nelson Research revealed

• Lack of revision was the most important factor why they did not do as well as they expected.



Nelson: student's comments

- I tried to revise with my friends. It lasted about 5 minutes.
- I left the revision until the last minute
- During the revision time I was on my own. I found it hard to get on with it.
- Some teachers give you advice on how to go about revising and even do some at school.



Nelson: revision methods

- Preferred revision technique is something that varies from person to person but it is important that you ask questions of the material you are studying
- Reading through your notes is not a very effective way of revising.....
- Students need help to discover the best way to revise.



Other research......

- Boys tend to put off revision until the last moment
- They are reluctant to engage in extensive coursework and prefer cramming themselves for the final one examination
- 'Do not expect boys' characteristics to changethey won't;use them to set boys up to win.'



Techniques should be....

- Upbeat, challenging, achievable and not take too much of their valuable leisure time!
- · " economy of effort'
- "Work smart not hard"
- "return on investment"





Neall's approach for boys

- Set up a process
- Work in short regular bursts
- Provide immediate feedback on progress
- Create the right environment-
 - Enjoyable
 - He feels he can win
- Challenge them to combine exam preparation with ample leisure time



Abigail James.....boys and study

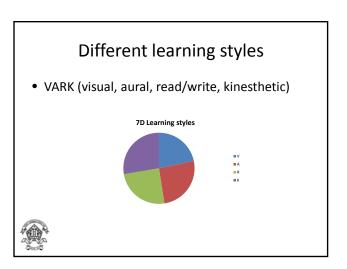
- Glance at a book
- Underline material (usually examples)
- Answer questions (under duress)
- Reading takes too long
- Inactive method of study
- Lacks organisation



- 'Boys think that ability not effort is what gets the best grades' [James]
- 'Boys believe in luck. They think that some kids get good grades because teachers like them. They don't connect practice with success. They believe that natural athletes become professional athletes: that smart kids naturally get the good grades' [Bryan].



Revision Pig To Receive Representation Pig Revision Fig Revision Fig



- A lot of universities suggest that students take Learning Styles tests but there is no definite correlation between 'discovering what learning style you are' and then using that to help you learn.
- Choosing effective strategies for different tasks seems to be more important.
- And exposing students to a range of thinking styles is considered more important.



Find and disseminate information

- Web sites, our experience, other teachers
- In our classrooms:
 - 'revise' became 'use a mind map'
 - revision techniques were taught:
 - Mind maps
 - Cornell notes
 - Flash cards
- Modelled active learning



For Students * Revision Pig * Revision Reading and Writing * Read and Mamorise Read and Memorise Read and Memorise Read and Memorise * Annotate your notes as you go and develop a list of key terms and concepts * Summary notes - short version of main notes. * Make a summary in your own words at the end of each section * List of keywords for each topic covered, which can act as "triggers" for other ideas. * Cover sections of a list or formula and set if you can supply the missing information * Learn general rules and prinsiples rather than masses of unrelated fasts * Connected information. Generally, it's better to know fewer topics in some depth than to try to remember isolated bits of information from across the subject. That is, it is easier to recall information that is connected and logically organized. * Different strategies are needed, however, to remember concepts and theories, argumentative material and systems. * Understanding the big picture, familliarizing yourself with any specialized vocabulary and explaining the ideas and processes to others will develop your understanding and recall of this type of material. * Draft some questions to test knowledge of the material you have just studied * Make a "Question fam" i.e. Write Question, fold paper, write answer, fold paper. Open at random. Do you know the answer for the question or the question for the answer?

2011- Flash cards

- Year 7 Science
 - Heading
 - Page number
 - Content

Boys need to be taught to effectively use a text book!



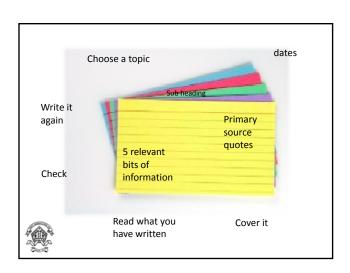
2011- practice exams

- Year 9 History paragraph question
 - 5 relevant points
 - Chunking
- Eves shut
 "Is that what you are meant to do?"
- Year 7 science
- Year 9 french



- Flash card video
- History class
- <u>Headmaster</u>

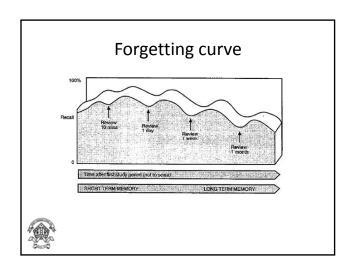




History flash cards

- From Revision Pig
- How to make Revision / Flash Cards
- Make cards. Reduce your notes to the key points
- Chunk into 'Bitesize' information
- Bullet points 4-6
- Then Highlight key words, 'Text Tagging'
- Cover, check
- Can you remember the whole point from just one or two key words?
- Cover, check again
 What's in my bullet points History, dates, names and quotes.
 English characters, who does what, who says what, quotes,
 separate cards for themes, characters, plot.

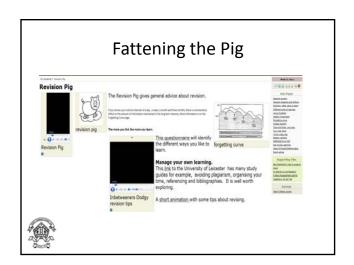


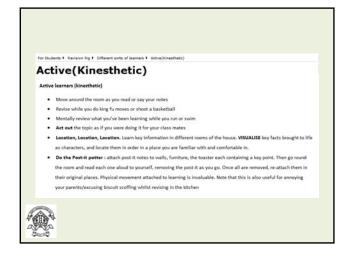


YOU MUST REVIEW

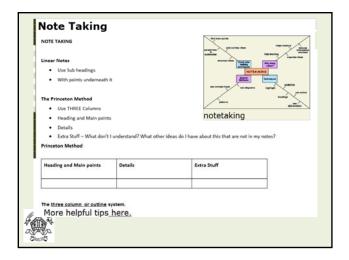
- 70% of what you learn is forgotten in 24 hours
- ~ 40% is forgotten immediately.











In 2012....

- Cornell notes
 - Explicitly teach it
 - with pictures
- Slogans in the classroom
- OneNote tagging
- Article in the school newsletter
- History sample exam.



Study skills may not be enough...

Dweck argues that 'Study skills and learning skills are inert until they are powered by an active ingredient ... Students may know how to study but won't if they believe their efforts are futile' [Dweck in Krakovsky, 2007].



Someone with a Fixed mindset will:

- Want to look good / smart at all costs
- Avoids challenges
- Pursue only activities where they are sure to shine
- · Believe that talent should come naturally
- Get defensive or give up easily
- · Hide mistakes and conceal deficiencies
- See effort as fruitless or worse
- Ignore useful negative feedback
- Feel threatened by the success of others



Someone with a growth mindset will:

- Emphasize learning something new over everything else
- Embrace challenges
- Take risks and won't worry about failure
- Each mistake becomes a chance to learn
- · Persist in the face of setbacks
- Believe the harder you work the better you become
- · Learn from criticism
- Capitalize on mistakes and confront their own deficiencies
- Find lessons and inspiration in the success of others



Dweck does describe how fixed mindset college students study: 'They read the textbook and their class notes. If the material is hard they read it again. Or they try to memorise everything they can like a vacuum cleaner' [Dweck, 2008:61]. On the other hand growth mindset students 'took charge of their own learning and motivation ... they look for themes and underlying principles and go over mistakes until they understand them ... They were studying to learn, not just to ace the test' [Dweck, 2008:61].



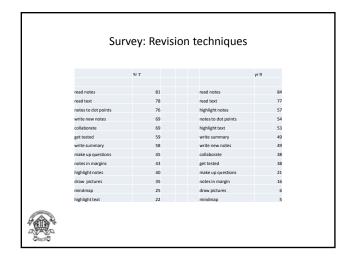
Girls are seen as 'perfect' and get praised more in the classroom. So they take any criticism much more to heart, Boys are four times more likely to be criticized but it often takes the form of: 'Pay attention, Listen to instructions and you can do better.' In a way they are being exposed to a growth mindset. To some extent the criticism also rolls off boys' backs and they don't take it to heart so much [Dweck on ParentMap, 2012].

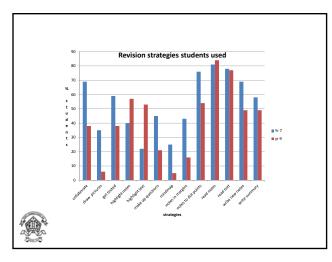


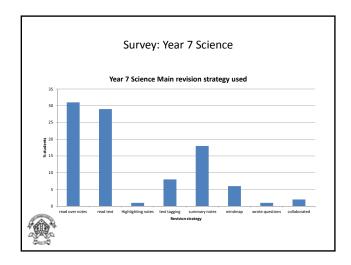
a year 9 boy

- 'Why do I have to learn anything? It's all on Google'.
- Is this a reflection of a fixed mindset?
- Is it simply a typical comment from a child of the digital age?







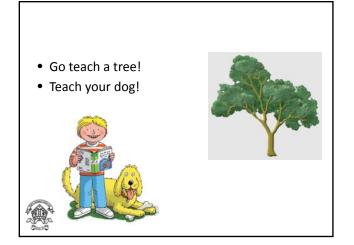


In the classroom....

We remember:

- 20% of what we read
- 30% of what we hear
- 40% of what we see
- 50% of what we say
- 60% of what we do
- 90% of what we see, hear, say and do!





Has it helped?

- Outside exams Boys + flash cards
- The bookroom ran out of flash cards
- Boys actually did revision for the exams!
 - Pictures help me learn better
 - Can I print another copy and do it again?
 - Is there something on Revision Pig......



- "The test was really easy if you had learned something."
- We are still fattening the Pig.



Contact us

- Dr Heather Evans
- evansh@trinity.vic.edu.au
- Dr Dianne McDonald
- mcdonaldd@trinity.vic.edu.au

