

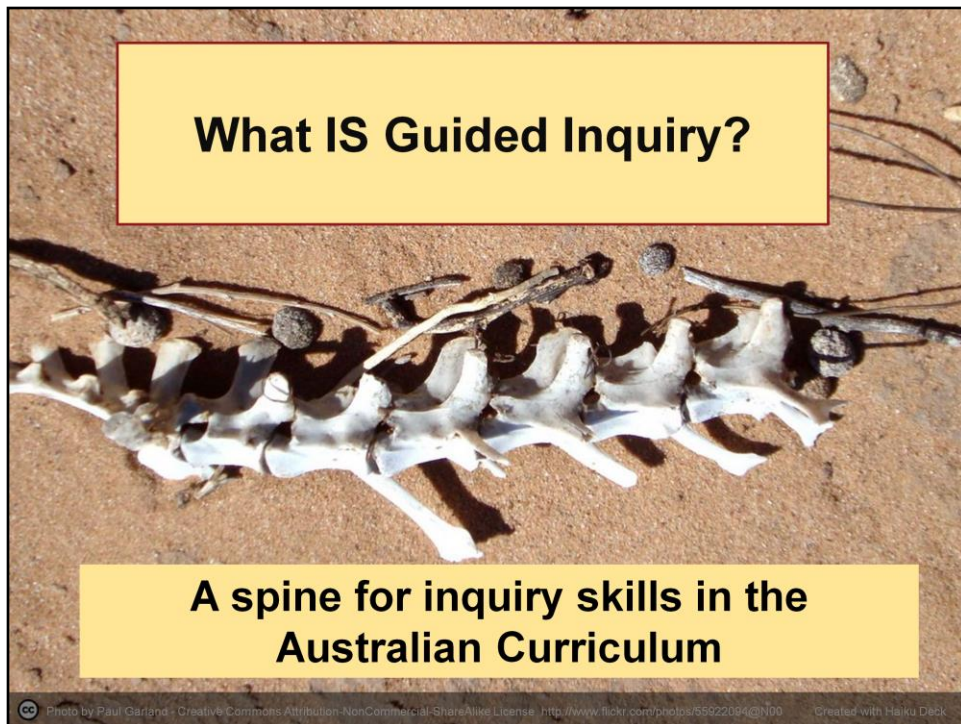


++++

Guided Inquiry under the Microscope

***School libraries making a difference: connections
and collaborations***

Wednesday 17 September 2014
Concurrent session 11 – School Libraries
Lee FitzGerald
Lecturer in Teacher Librarianship, Charles Sturt University



Together, we are stronger is the overarching theme of this conference, and the school libraries sub theme of this is **Connections and Collaborations**.

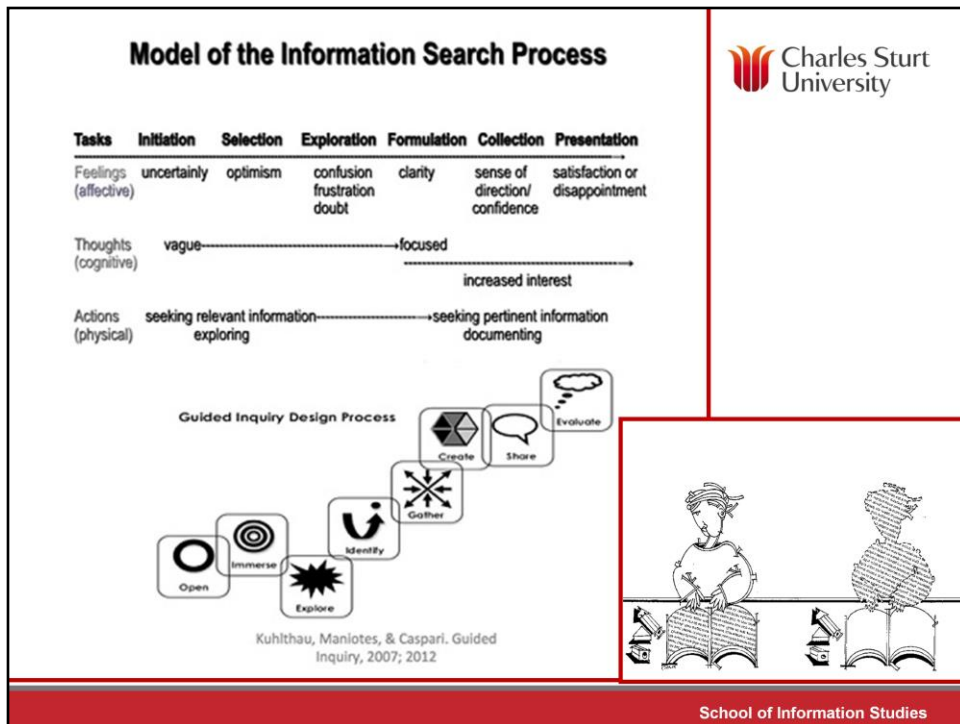
My presentation is about the impact Guided Inquiry has on student learning.

Continuous reflection on learning is an essential part of every Guided Inquiry, allowing students to make **connections** relating to **content** in the form of answers to their questions, and in relation to **metacognition** (recognising the strengths and weaknesses of the way they learn).

Guided Inquiry is defined simply by its originator, Carole Kuhlthau as: Inquiry that is guided by an instructional team to enable students to gain a depth of understanding and a personal perspective through a wide range of sources of information. The instructional team guiding inquiry is centred on **collaboration**.

To thrive, students must be able to question, find a way through complex and disparate information, formulate their own focus and answers, and transform information into knowledge. They need to learn the skills of working in teams. These are the skills of the 21st century worker, and they are synonymous with the skills of Guided Inquiry.

The Australian Curriculum is peppered with such 21st century information skills. There appears to be no process on which to hang these skills.



I am proposing the processes of Guided Inquiry:

Information Search Process, which is supported by more than 30 years of research by Professor Carole Kuhlthau. Essential to the process is the time it takes to develop deep learning.

New to Guided Inquiry is the **Guided Inquiry Design Process**





The two sit side by side. The Information Search Process describes (IS) what students do when they research; and the Guided Inquiry Design process is what the inquiry community (the class) is doing.

The purpose of this process is to prevent the kind of blind and useless copying and pasting that happens when students don't engage in assignment learning.

Central to the ISP is recognition:

- that it takes a long time to develop a personal take on information
- that the way to that personal take can involve information overload and stress, but that it is worth it to make the learning meaningful.

This is an observed process, that Professor Kuhlthau saw in more than 30 years of research, as simply the way people do research. i.e. It's not imposed, just IS.





What student is doing in ISP	Stage of ISP	Phase of Guided Inquiry	What the Inquiry community is doing in Guided Inquiry
Initiating the research project	Initiation	Open  Open	Invitation to inquiry Open minds Stimulate curiosity
Selecting a topic	Selection	Immerse  Immerse	Build background knowledge Connect to content Discover interesting ideas
Exploring information	Exploration	Explore  Explore	Explore interesting ideas Look around/dip in.
Formulating a focus	Formulation	Identify  Identify	Pause and ponder Identify inquiry question Decide direction

School of Information Studies

This slide and the next shows the interaction of the two process – ISP and GI design process.

You see what the student is doing in ISP - note how long it takes to get to formulating a focus.

You see what the inquiry community – teachers, TL and student is doing at each phase of the GI Design process – Open/Immerse/Explore/Identify/etc

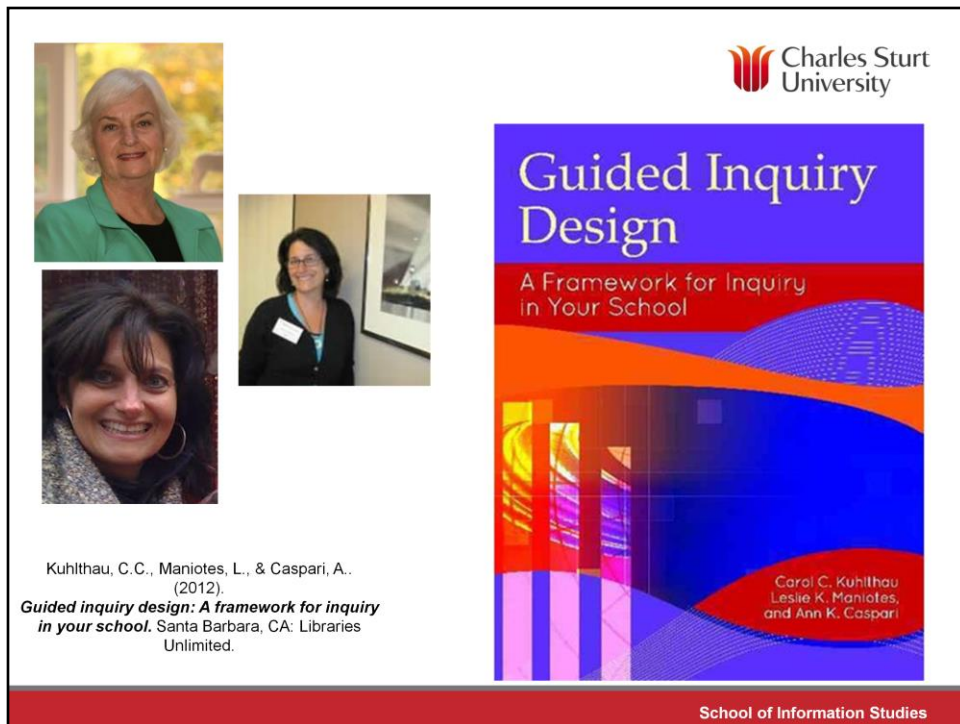
What student is doing in ISP	Stage of ISP	Phase of Guided Inquiry	What the Inquiry community is doing in Guided Inquiry
Collecting information on focus and seeking meaning	Collection	Gather  Gather	Gather important information Go broad Go deep
Preparing to present	Presentation	Create  Create	Reflect on learning Go beyond facts to make meaning. Create to communicate
		Share  Share	Learn from each other Share learning Tell your story
Assessing the process and the product	Assessment	Evaluate  Evaluate	Evaluate achievement of learning goals Reflect on content Reflect on process

School of Information Studies

This is the closing phases of the ISP and GI Design processes.

Note the collecting phase suggests a different kind of searching necessary at this phase – the difference between relevant and pertinent information.

Students “do” or “can’t help doing” (it’s natural) the ISP, and their GI is organised under the phases of GI Design – which appear to make perfect sense to them.



Guided Inquiry Design process is from this book:

Some other concepts in Guided Inquiry:

Third space: bringing the world of the student (first space), the world of curriculum (second space) into a third space where first space and second space can merge – where students can construct world views of their own, rather than those mandated by curriculum or teachers or text books.

Whole units delivered by inquiry – i.e. No teaching, all learning taking place by inquiry with teacher and TL facilitators.

Inquiry community and Inquiry circles

6C's: Collaboration, Conversation, Composition, Choosing, Charting, and Continuing

Journals, logs and inquiry charts

Reflection throughout

Culmination conversation - Culmination conversation is a formal part of each GI Unit, and is highly structured in GI design. It works very well, to have the whole team reflect on the success or otherwise of each unit, the success or otherwise of each student. TO WRITE IT DOWN, and have it for next time.

This feature can be taken to students as well, including a culmination conversation as our final element of each task. Students are asked a higher order question coming out of their area of study, and are put on the spot to answer, and show whether they can apply their knowledge, and show deep learning.

++++

Does Guided Inquiry enhance learning and metacognition?



School of Information Studies

The main point of this presentation is to present some preliminary findings from the research just carried out at Loreto Kirribilli in Sydney.

History students carried out an historical investigation, with one class conducting their investigation using Guided Inquiry methods and scaffolding, while the other class had scaffolding at a moderate level.

The Ancient History class conducted their historical investigation using a full Guided Inquiry approach. This included:

- * Categorising major topic areas into broad areas, e.g. Ancients Behaving Badly, and Through Modern Eyes, to assist students in the choice of their topic.
- * Working in inquiry circles on groups tasks for developing and synthesising information in the broad categories with a particular focus on question formation.
- * Daily reflection on a student wiki, with feedback from teacher and teacher librarian on a weekly basis.
- * Demonstrations of how to use resources, such as Evernote, Easybib and History databases from the teacher librarian.
- * A culmination conversation where each student is asked to apply their knowledge to a higher order question related to their topic.

The Modern History group did their research with a moderate level of scaffolding and support, while not using the Information Search Process, Inquiry circles, or group activities of Guided Inquiry. They were provided with access to the same resources as the Ancient Historians and also carried out a culmination conversation.

What did the Guided Inquiry look like?

Wiki Pages & Files Users Settings

VIEW EDIT

☆ FrontPage

last edited by Lee Fitzgerald 3 months ago Page history

2014 Ancient Historical Guided Inquiry

Weighting: 30%
Marks: Product, 10% Process: 20%

Information Search Process

Figure 1.1 Guided Inquiry Design Process. (Kuhlthau, C., Maniotes, L. and Casper, A. 2012).

School of Information Studies

It was on a wiki.

Inquiry circles

You are to choose one of these topic areas from the Ancient World:

Inquiry circles	Examples of individual topics (You are free to think of your own!)
Ancient mysteries/Lost cities	Atlantis, Stonehenge, Hanging Gardens of Babylon, Alexandria, Deir el-Medina, Thera (Santorini), Delphi, Dwarka, Angkor complexes of Cambodia.
Turning point - Decisive events and issues	Thermopylae, Salamis, Megiddo, Ipsus, Gaugamela, Marathon, Actium, Zama, Sea Peoples Of the Mediterranean.
Ancients behaving badly	Boudicca, Jezebel, Alexander the Great, Attila the Hun, Caligula, Cleopatra, Genghis Khan, Hannibal, King Herod, Qin Shi Huang and Nero
Through modern eyes - How does modern media portray ancient society?	Modern representations of an ancient site, issue, event, battle, personality, controversy through art, music, literature, film, play, - for example, Thermopylae, Cleopatra, Alexander, Spartacus, Julius Caesar, Clash of the Titans, Gladiator, Masada
Inspiring leaders and thinkers	Julius Caesar, Socrates, Aristotle, Hannibal, Herodotus, Tacitus

School of Information Studies

The use of inquiry circles was very useful for students choosing similar topics,

Boudicca, Nero, Sea peoples, Thera, Salamis and Thermopylae girls worked together.

They did:

- ❖ a question focus formulation activity at Immerse to help them share their research, and formulate some research questions
- ❖ a pair/share/pair protocol at identify to share notes, and to try to help each other formulate their inquiry questions.
- ❖ a mind map to chart their essays using Webspiration.

Individual student tasks and deadlines

Decide my topic area and complete Research Reflection 1	Post to your wiki page on May 8.
Complete Research Reflection 2 - share Evernotes with Mrs. Bleby and Mrs. FitzGerald	Post to your wiki page on May 16.
Complete Research Reflection 3 - Evernotes	Post to your wiki page on May 30.
Your mind map	Bring to class June 2.
Your essay, Final Reflection and Easybib bibliography Evernotes will be checked for your process mark.	HAND IN (and post on your wiki page) on June 10.
Round table explanation of your essay.	3 questions relating to content of your essay. June 10.

These were the individual student tasks

Three reflection sheets

Mind map

Essay

Final reflection

Easybib

Round table discussion

Student page on wiki

[VIEW](#) [EDIT](#)

☆ Catherine

last edited by Catherine 2 months, 2 weeks ago [Page history](#)

[Research Reflection 1 Catherine W.doc](#)

[Research Reflection 2 Catherine W.doc](#)

[Research Reflection 3 Catherine W.doc](#)

[Final Reflection Catherine W.doc](#)

[Final Essay Catherine W.doc](#)

[Bibliography Catherine W.doc](#)

[Daily Log 1](#) - 5/5/2014

What did I achieve today?
As I had previously decided on my topic, today I was able to familiarize myself with the details and sequence of events that had taken place within the Battle of Salamis by reading from multiple sources. I was able to gain a deeper understanding of the context, including the two warring sides (Greece and Persia), significant figures and the strategy that was employed in the defeat of the Persians. I also read about the Battle of Thermopylae in order to establish more background information about my event.

School of Information Studies

Each Ancient History student had a page on the wiki where she submitted the reflections for the research and all the parts of her process, her essay and bibliography.

It was also used for a daily log.

Log Diary #6

12-05-14

What did I achieve today?

Today I decided to take a different path and research Alexander the Great through the lense of someone close to him. I discovered that Alexander had a close relationship with his tutor, Aristotle and so I researched Aristotle's perspective on Alexander and the context at the time. It was a lot harder then I thought as there is little information on him in relation to Alexander as every website talked about his philosophy and interest in science. I also researched Alexanders mum as she apparently had quite an influential role in his early life.

What are my plans for...

a.) Tomorrow:

I will refine my easybib to keep up to date with my sources and where I found them. I will continue researching and looking for interesting perspectives on Alexanders life that may offer some variation from his military leader persona. I think I'll get a map of Greece and pinpoint the location of his major battles and create an almost timeline of his military life.

b.) Long term:

I am considering that maybe I should compare Alexander with his predecessors or other Kings at that time to get a sense of what it is that has separated him from others and allowed his name to be remembered for around 2 millennium.

What areas of concern do I have?


Currently I feel a bit confused with which information to invest more time in and whether my research is too broad or not enough, however I definitely know a lot more about Alexander than I did prior to these last few days.

This student investigating Alexander the Great is looking at him from a personal relationship standpoint and is finding it hard.


She talks about what she'll do next, and is right at the stage of moving from generalised information into the personal take that she is finding hard. How to go about finding the pertinent information on the personal relationships in Alexander's life?

Difficult!

Feedback from teachers and teacher librarians




Comments (5) [Delete all comments](#)




Lee FitzGerald said
at 12:43 pm on May 13, 2014
[Reply](#) [Delete](#)

Hi Alice, have you decided yet between Alex the Great and Nero? Students in the past have done both figures, and probably got their teeth more into Alexander. Nero's definitely an Ancient Behaving Badly, though he did some good civic stuff as well. It's good you're going to decide by getting GENERAL information about both, and that should really help you. Don't go deep on either of them at this stage, or you might get overloaded and fall down the dip in the Information River! Make sure you've got Easybib going, and Evernote for your notes. For the latter, just go www.evernote.com and join up. Mrs Bleby had some good headings for your notes, you could ask her. For an overview of Alex the Great, try this: <http://www.pothos.org> : All about Alexander the Great




jbleby@foreto.nsw.edu.au said
at 7:34 pm on May 14, 2014
[Reply](#) [Delete](#)

Hi Alice - woopoh I see only 1 log and no Reflection 1 - what has happened? What have you decided re topics? I am concerned - remember there is a process mark and this becomes evidence for that process mark. Regards, Mrs Bleby



suebognor said
at 10:53 am on May 19, 2014
[Reply](#) [Delete](#)

Hi Alice. We talked on Friday about Clickview Online, Questia & Easybib. I hope you had time over the weekend to look at these. I will be with your class today for 2 periods so please ask for help if you are not sure of anything.




Lee FitzGerald said
at 4:53 pm on May 31, 2014
[Reply](#) [Delete](#)

Hi Alice, I've had a look at your Evernotes, and they're well organised. Is your question going to be about whether he was "great" or not, looking at ancient and modern sources? sounds like that's the way you're heading. These links might help you:
<http://www.livius.org/aj-aj/alexander/alexander00.html> Also, I've attached an article just above on your page, called, Alexander the Great: Hunting for a new PastHope this helps. Mrs. F.


School of Information Studies

Each student got this level of feedback from two TLs (me and Sue Bognor) and their teacher, J Bleby. As well as in person, from TL and teacher.

We are watching their process for the personal take, for searching right for the stage of the ISP she is at, for using Questia, Easybib, and we also visited their notes on Evernote.



Charles Sturt University



First Notebook

Bryn Mawr Classical Review 2004.07.13.
5/29/14 Author: Jan P. Stronk Bibliography: Stronk, J. P. (2004, July 13). Bryn Mawr Classical Review 2004.07.13. Retrieved May 26, 2014, from <http://bmcr.brynmawr.edu/2004/2004-07-13.html> Quotes:

Fifty Key Thinkers on History
5/29/14 Author: Marnie Hughes-Warrington Bibliography: Hughes-Warrington, M. (2000). Herodotus. In Fifty Key Thinkers on History(pp. 156-164). London: Routledge. Quotes (with page

History: A Very Short Introduction
5/29/14 Author: John H. Arnold Bibliography: Arnold, J. H. (2000). Chapter 2 From the tails of dolphins to the tower of politics. In History: A Very Short Introduction(pp. 16-18). Oxford: Oxford

Writing Ancient History
5/29/14 Author: Neville Morley Bibliography: Morley, N. (1999). What is History. In Writing ancient history(pp. 25-26, 63, 128-129). Ithaca, NY: Cornell University Press. Quotes (with page numbers): "His

The Past and its Presenters: An Introduction to Issues I...
5/29/14 Author: John Warren Bibliography: Warren, J. (1998). From the Birth of Historiography to the Renaissance. In The past and its presenters: An introduction to issues in historiography(pp. 36-46).

A History of Histories: Epics, Chronicles, Romances and ...
5/29/14 Author: John W. Burrow Bibliography: Burrow, J. W. (2008). Herodotus: The Great Invasion and the Historian's Task. In A history of histories: Epics, chronicles, romances and inquiries from

Herodotus: Father of History, Father of Lies
5/29/14 Author: David Pipes Bibliography: Pipes, D. (n/a). Herodotus: Father of History, Father of Lies. Retrieved May 6, 2014, from

School of Information Studies

Part of the process of providing support, and the process counting as much as the essay itself was the establishment and monitoring of student accounts on Evernote.

This is an example of a student's notes on Herodotus.

First Notebook Enemies Historian Other Predecessors Religion Sources INFO TOOLS

Created: May 29, 2014 Modified: May 29, 2014

**Overview source
Gathering of quotes.**

Author: Marnie Hughes-Warrington

Bibliography: Hughes-Warrington, M. (2000). Herodotus. In *Fifty Key Thinkers on History* (pp. 156-164). London: Routledge.

Quotes (with page numbers):

- "... suggests that he travelled widely, visiting Egypt, Cyrene, Babylon, Italy, the Ukraine, the Black Sea and the north Aegean area." (pg 156)
- "Herodotus embarks on the 'demonstration of his research' in order to preserve the essential facts and causes of recent events, a demonstration unparalleled in the ancient world." (pg 157)
- "Herodotus had his predecessors in prose writing, but they wrote either histories of particular groups or cities or accounts of travel over the known world. No one until Herodotus, as Dionysus of Halicarnassus pointed out, had put together the many varied events of Asia and Europe and a description of their people and land in a single work." (pg 157)
- "Arrogant people, Herodotus tells us, are liable to ignore warnings. Once they overstep their mortal limits, punishment is visited upon them in the form of Justice (Dike) or Retribution (Nemesis). This point may be seen in the account of the rise and fall of Cyrus in book 1." (pg 159)
- "Herodotus leaves us in no doubt that Xerxes is a harsh and megalomaniacal ruler....The Greeks, in Herodotus' estimation, are a hard people who work together to keep poverty and invaders at bay. This difference between 'hardness' and 'softness' explains the success of the Greeks." (pg 159)
- "In the Histories, Herodotus only mentions one predecessor, Hecataeus of Miletus, who wrote a work on historical geography...Herodotus had read what Hecataeus wrote about Egypt, but too little of *Periodos* survives to measure how dependent he was on it." (pg 159)

School of Information Studies

A closer look at the way this student took notes –

It's a gathering of quotes, with bibliographic details, rather than the detailed point by point notes we might expect (or have inflicted on students)

Assessment - Product



Year 11 Ancient History Preliminary Course 2014 Historical Investigation Assessment Task Cover Page

Outcomes:

P2.1 Identify historical factors and explain their significance in contributing to change and continuity in the ancient world.

P3.4 Identify and account for differing perspectives and interpretations of the past

P4.2 Communicates a knowledge and understanding of historical features and issues using well structured written form.

Marking criteria - product	Marks
<ul style="list-style-type: none">Well constructed introduction that establishes an analytical line of argument and clearly addresses the historical questionConstruction of question shows advanced synthesis of the topic studiedEvaluates historical factors and logically explains their significance in contributing to the historical argument.Clear identification and linkage of a variety of sources to the argument.Evaluation of differing perspectives and interpretations explicitly linked with the argumentResponse is logical and well structured, competently addressing the question with a sustained argument that demonstrates both breadth and depth of historical information.	21 - 25 A

School of Information Studies

This is the marking criteria for product – the essay. 25 marks.

Assessment - Process

Year 11 Ancient History Preliminary Course 2014

Historical Investigation Assessment Task Cover Page

Criteria for the process part of this assignment relate to this outcome:

P3.6 Plan and present the findings of historical investigations, analysing and synthesising information from a range of sources.

Marking Criteria - Process	
<ul style="list-style-type: none">• Highly competent management of area of interest, using all available background knowledge, and scaffolding provided on project <u>wiki</u>.• High level investigative skills leading to well formulated enquiry question.• High level skills of research for and organization of in-depth information, strongly synthesizing information from primary and secondary sources, evident in <u>Evernote</u> notes.• Strong participation in Inquiry circle activities.• Strong awareness and reflectiveness on information process, as evident in Reflection sheets, which were presented on time.• Correctly referenced bibliographic details, including a wide variety of sources. Outstanding use of footnote techniques.	21 - 25 A

This is the marking criteria for process – equal marks with product.

This is the strongest evidence a teacher librarian can have that she is contributing to student learning!

Process components:

- ❖ Use of wiki, use of Evernotes,
- ❖ Well formulated inquiry question
- ❖ Participation in inquiry circles
- ❖ Use of reflection sheets
- ❖ Bibliography and footnotes.

Teacher librarian responsible for the marking of process. This is solid evidence of contribution to student learning.

Research instrument: Questions in the SLIM (School Library Impact Measure) Toolkit



Q1: Take some time to think about your topic. Now write down what you know about it.

Q2: How interested are you in this topic? Not at all/Not much/Quite a bit/A great deal

Q3: How much do you know about this topic? Nothing/ Not much/Quite a bit/A great deal.

Q4: When you do research, what do you generally find easy to do?

Q5: When you do research, what do you generally find difficult to do?

Q6: What did you learn in doing this research project?

School of Information Studies

These were presented to students at beginning, middle and end of the task. It is the SLIM Toolkit - Student learning through inquiry – from Professor Ross J Todd of Rutgers University.

Control group issues:

It was intended that the control group of Modern Historians take exactly the same survey questions.

It turned out that the only valid responses were for Question 5, which was offered three times during the process of the research, in line with the question being offered to Ancient Historians, and for Question 6.

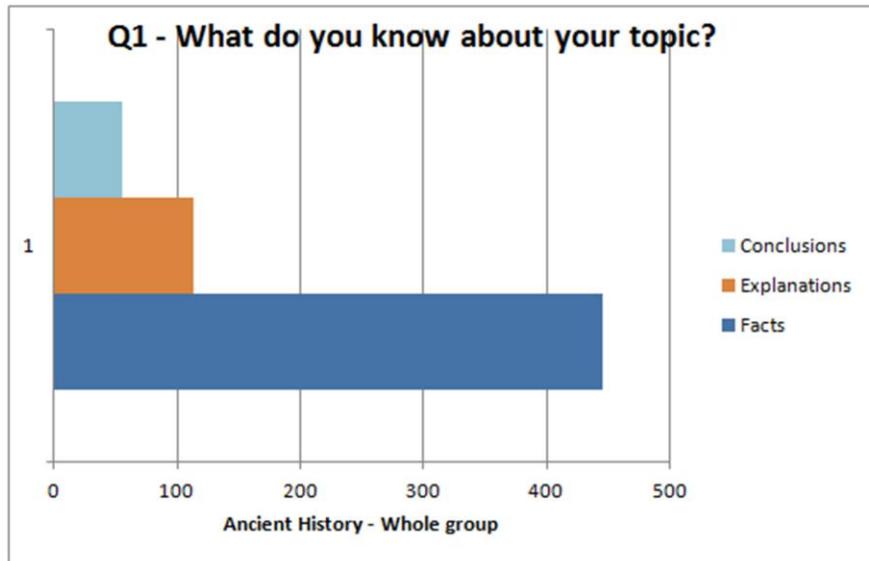
This is why I've included Modern History responses only for those questions.

Other research questions

- Exit survey on inquiry itself, use of technologies (wiki/Evernote/Easybib and Webspiration), and support offered by teacher and TL.
- Describe your feelings as you progressed through the stages of the Information Search process.

These were offered only to the Ancient Historians and are not part of my CSU research, but very interesting.

Q1 – Ancient History



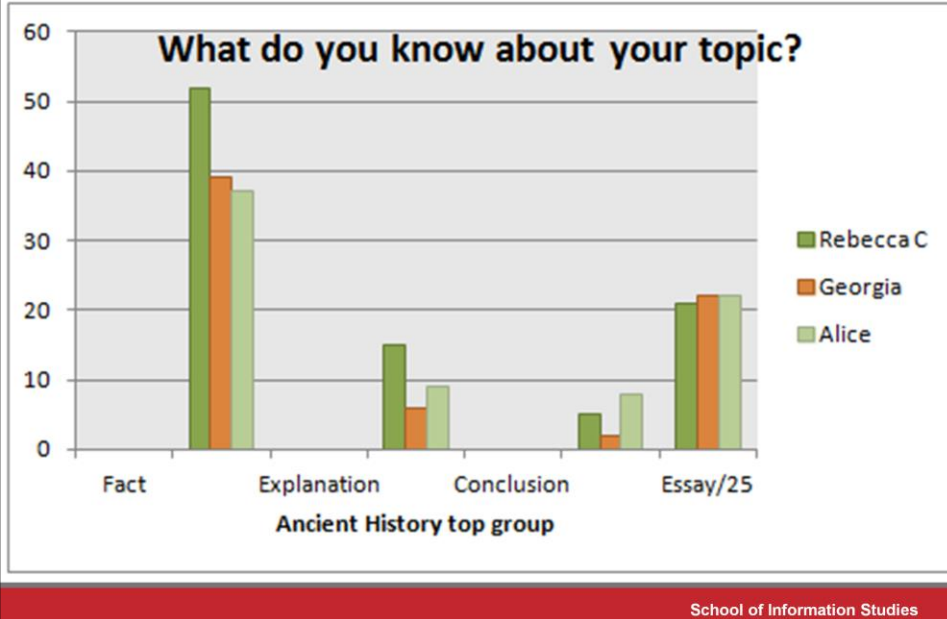
School of Information Studies

Question 1 involves the process of reading responses on the SLIM reflection sheets to count the number of facts/ explanations and conclusions students have made at three processes in their research. The theory being that students should progress from fact gathering to a smaller level of explanations and conclusions.

This is a blunt instrument, which adds all facts, explanations and conclusions for the whole group for the whole process. Showing an excellent growth from facts to explanations to conclusions.

One of Professor Ross Todd's themes is about fact gathering in student research. About superficial effort in knowledge construction: stockpiling of retrieved facts with limited intellectual engagement: transport not transformation. His point being that unless students are engaged in an inquiry that fascinates them, they will stockpile facts.

Q1 – Ancient History



This slide shows a closer look at facts, explanations and conclusions with the students who gained top marks for process and for their essay.

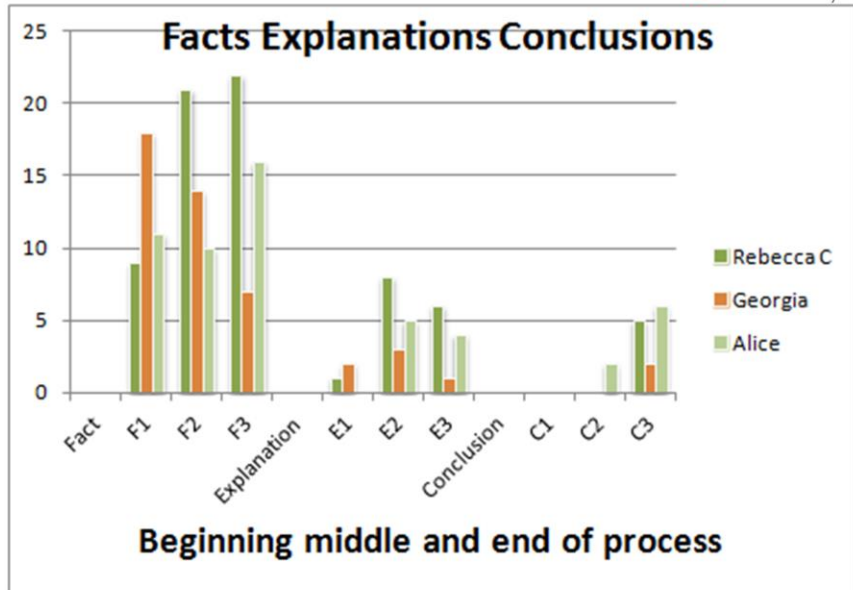
Added to the counting of F E and Cs was the search through their essays for conclusions. Their essays show a uniformly high level of conclusions. The result here shows Rebecca, Georgia and Alice's total facts, explanations and conclusions for the whole process. They all show a gathering of facts, a smaller gathering of explanations, and few conclusions.

Rebecca: Sea Peoples

Georgia: Boudicca

Alice: Alexander the Great.

Q1: Ancient History – Top group

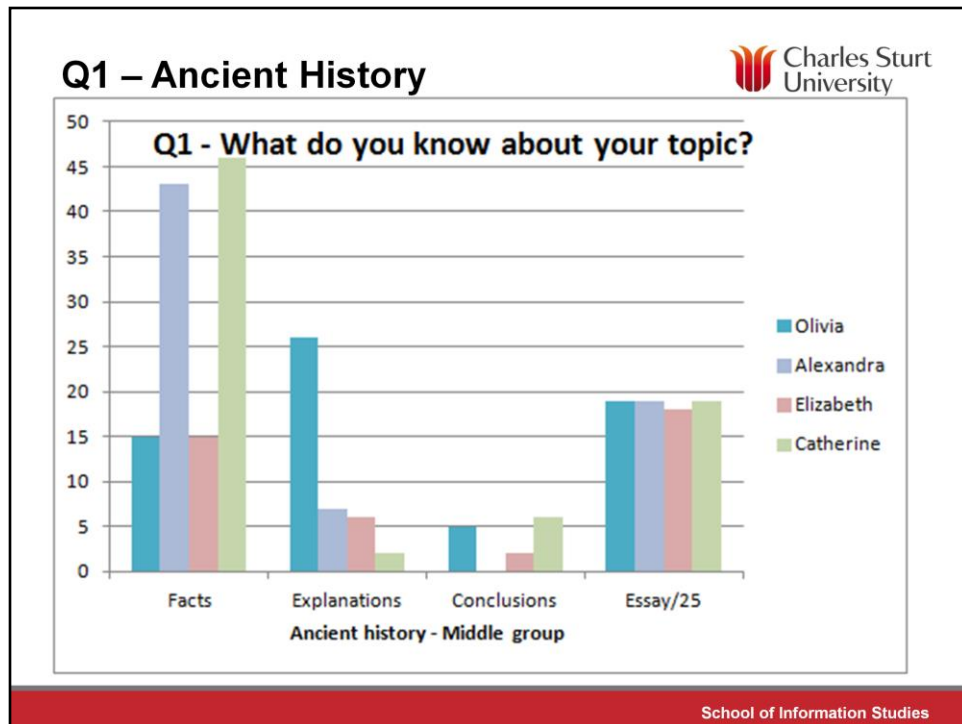


School of Information Studies

This graph shows the same three students and the number of facts, explanations and conclusions they had at the **three gathering points**.

Just take Georgia in Orange – she has a high level of facts at F1, less at F2, and less still at FE, with a corresponding growth in explanations at E1, E2 and then less at E3, when she is moving into conclusions.

The move we are looking for is from lots of facts at the beginning, diminishing at the second and third collection points into a smaller but clear growth of explanations and conclusions.



This slide shows a closer look at facts, explanations and conclusions with the students who gained middle marks for process and for their essay.

Added to the counting of F E and Cs was the search through their essays for conclusions. Their essays show a high level of conclusions, but slightly less than their counterparts who gained best marks. The result here shows Olivia, Alexandra, Elizabeth and Catherine's total facts, explanations and conclusions for the whole process. They all show a gathering of facts, a smaller gathering of explanations, and few conclusions. Except for Olivia!

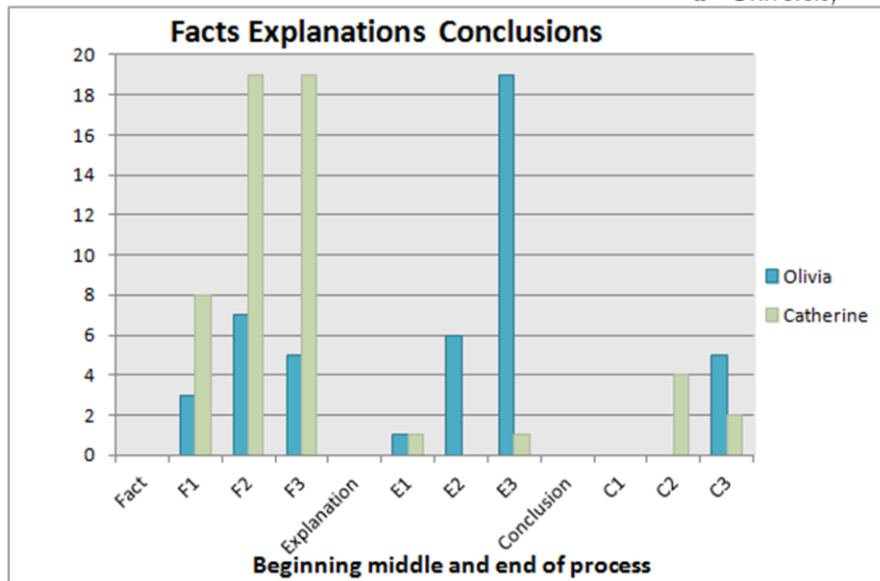
Olivia – Khufu

Alexandra - Most interesting question! Who owns the past?

Elizabeth – The Battle of Thermopylae

Catherine – The Battle of Salamis.

Q1: Ancient History – Middle group



School of Information Studies

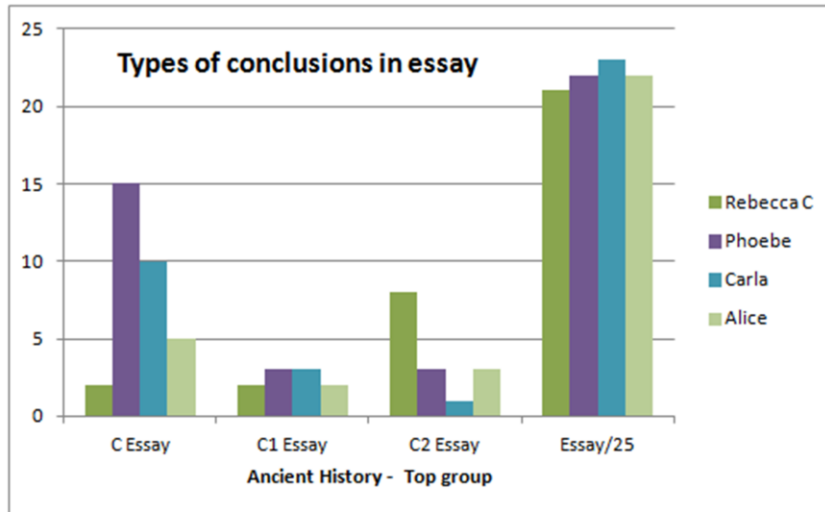
This graph shows two of the same three students and the number of facts, explanations and conclusions they had at the **three gathering points**.

Just take Catherine in pale green: She has a large number of facts throughout, few explanations, and conclusions at C2 and C3 gathering points.

The move we are looking for is from lots of facts at the beginning, diminishing at the second and third collection points into a smaller but clear growth of explanations and conclusions.

This student does not show this clearly, and possibly it is her focus on fact gathering that led to her lower grade in her essay.

Q1 – Ancient History: Types of conclusions



School of Information Studies

I took Q 1 further in the essays of these students. It seemed to me that though there were many conclusions, they were of distinctly different quality, and it was like comparing chalk and cheese.

So, I made this differentiation:

C – Straightforward expression of conclusion, no justification or elaboration

C1 – Conclusion contains 1 justification or elaboration

C2 – Conclusion contains more than 1 justification or elaboration.

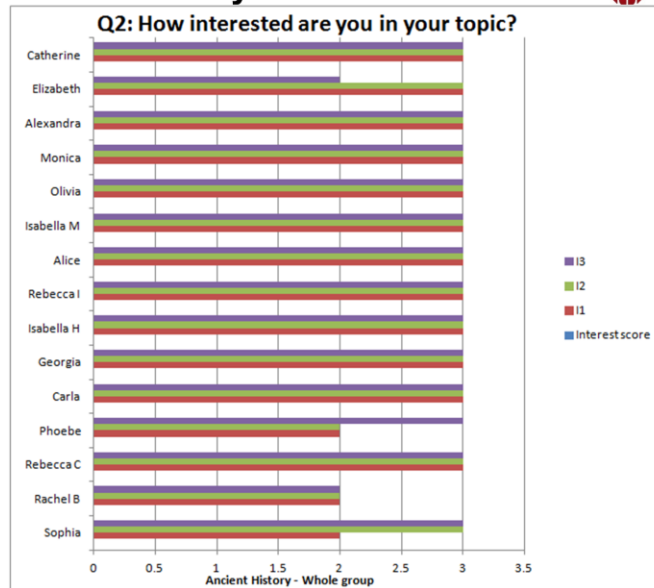
I analysed the essays of the top ranked students and found this:

They had a uniform number of conclusions in their essays.

Their conclusions included a substantial number of the richer kind of conclusions.

These students' essay marks were within a mark of each other, two gaining the same mark.

Q2: Ancient History



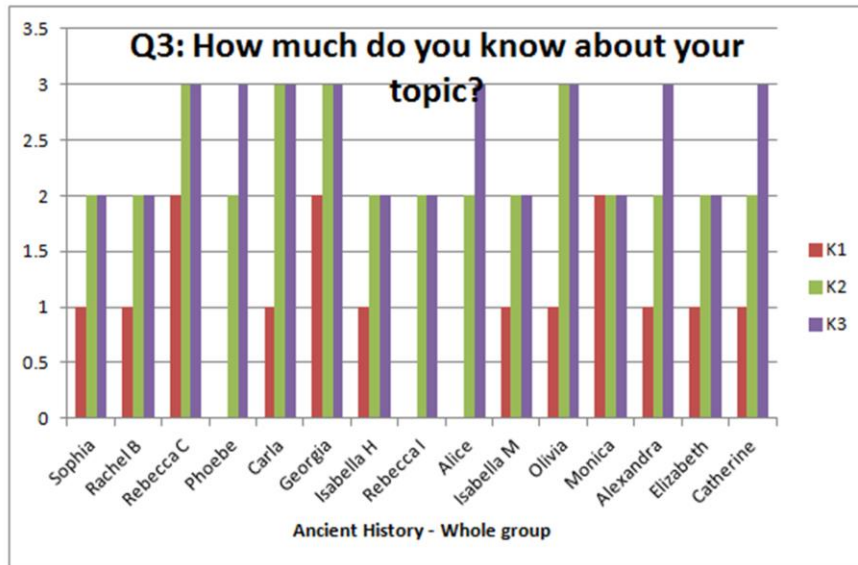
This question was given to students at beginning, middle and end of project.

They could choose not at all, not much, quite a bit, a great deal

This shows many students expressing a great deal of interest throughout – unwavering! Students with the three colours filled in completely have said that they were a great deal interested throughout the process.

Three diminished interest, but only to quite a bit.

Q3: Ancient History

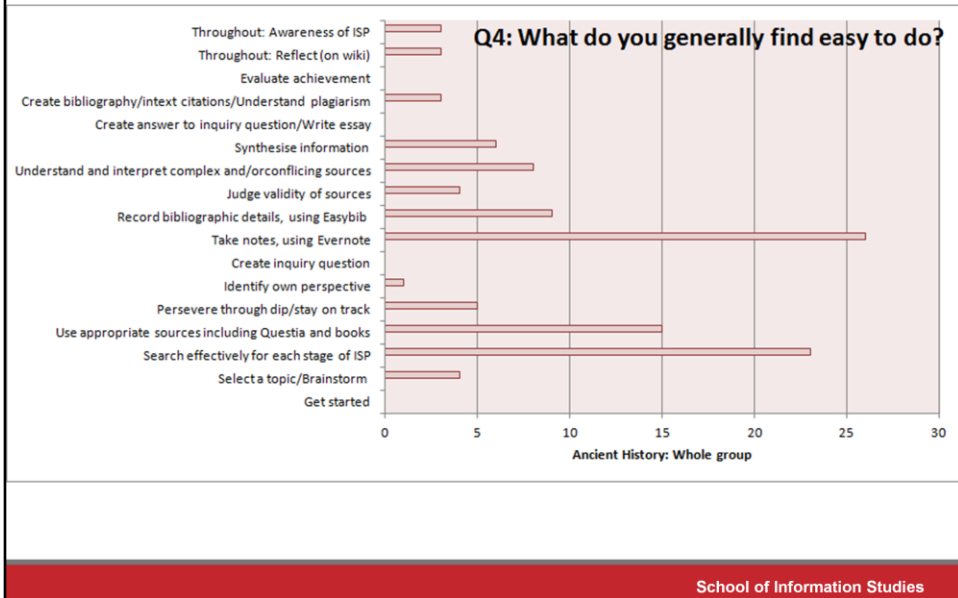


School of Information Studies

This shows student self judgment on how much they know about their topic. They could say nothing, a bit, quite a bit, a great deal.

Most started at knowing nothing and moved to quite a bit. Some judged themselves by the end of the project as knowing a great deal.

Q4 – Ancient History

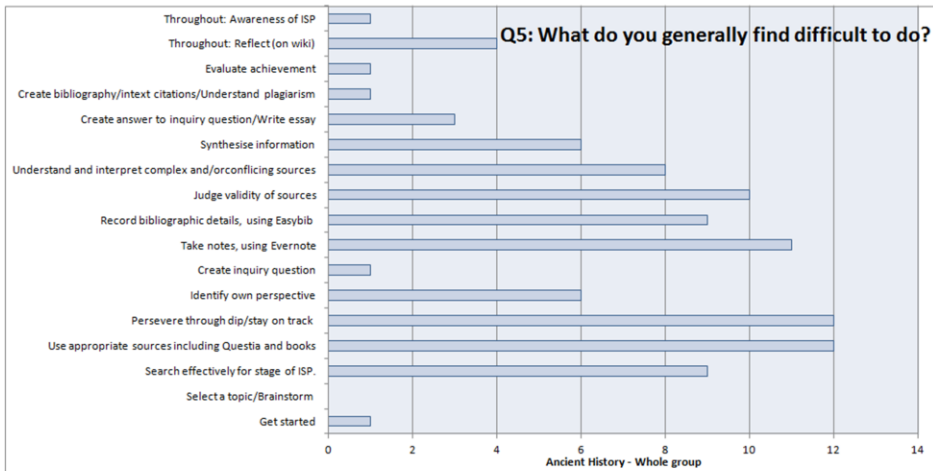


This was administered at beginning middle and end of project.

Interesting that the two things they say they could do best are Take notes, using Evernotes, and Search effectively for each stage of the ISP.

Interesting too that nobody thought it was easy to create an inquiry question, or to answer it.

Q5 – Ancient History



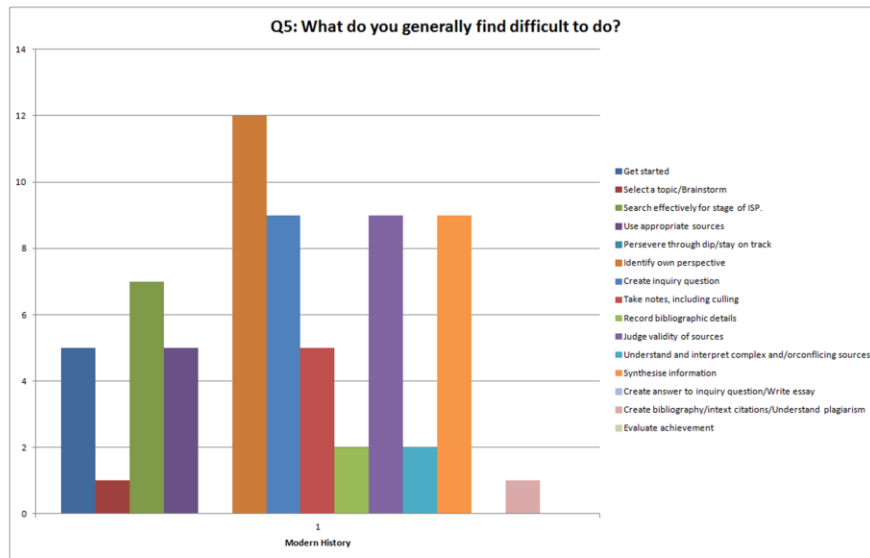
Interesting range of difficulties here –

Shows the knowledge that students have gained of the ISP

They could articulate that it is difficult to persevere through the dip and to stay on track, and to search effectively for the stage of the ISP. Their awareness of the process of research was articulated.

They have in common with their Modern History counterparts that understanding complex sources is very difficult.

Q5 – Modern History



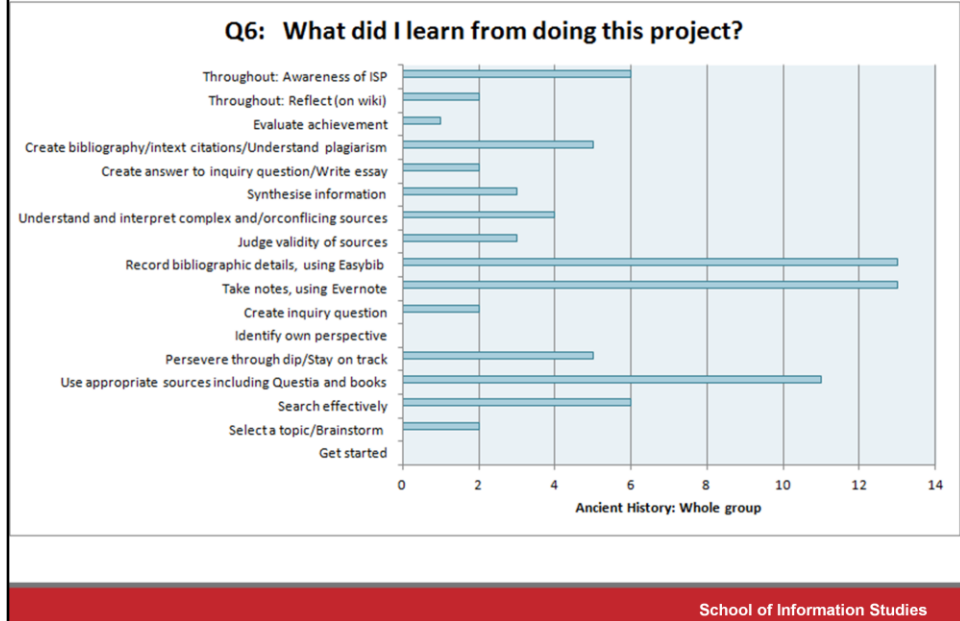
School of Information Studies

The Modern History group did not have the ISP outlined to them, so that their reported difficulties are a bit different:

Interesting that a significant number did not know how to get started. – Deep Blue
Identifying their own perspective was the greatest difficulty they had, Deep orange,
followed by equally, stay on track, use appropriate sources, and synthesise
information. Sky blue, purple, light orange

They report lower levels of difficulty with understand complex sources – it is possible
they didn't use them!

Q6: Ancient History



Ancient Historians learnt some of the same concrete tasks as the Modern historians, i.e.

They learnt to use Easybib, and to do footnotes.

Ancient historians highlight that they learnt to take notes using Evernote, they indicate a high level of awareness of the ISP, and they say they learnt how to use appropriate sources as their biggest learning. Not sure they really did!

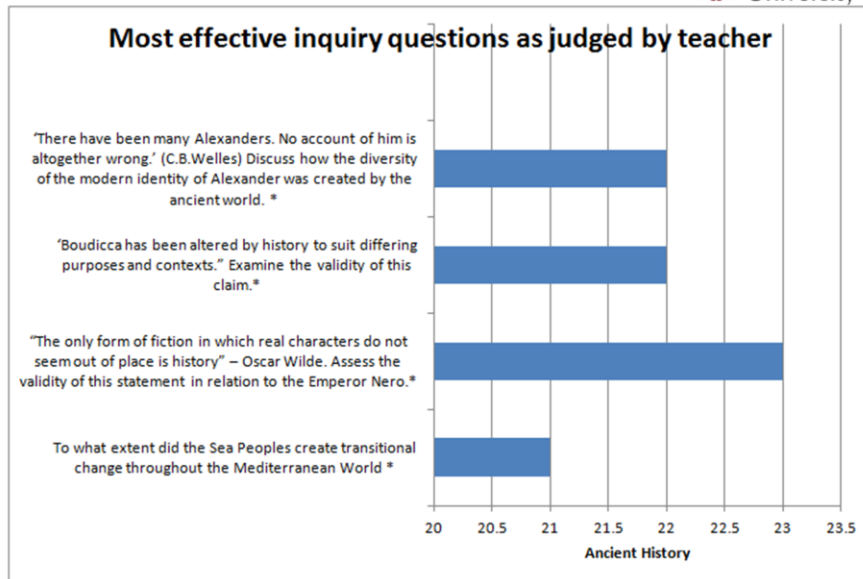
Q6: Modern History



This is the Modern historians' expressed learnings. The biggest one has lost its label, and it's to use easybib, and to do footnotes!

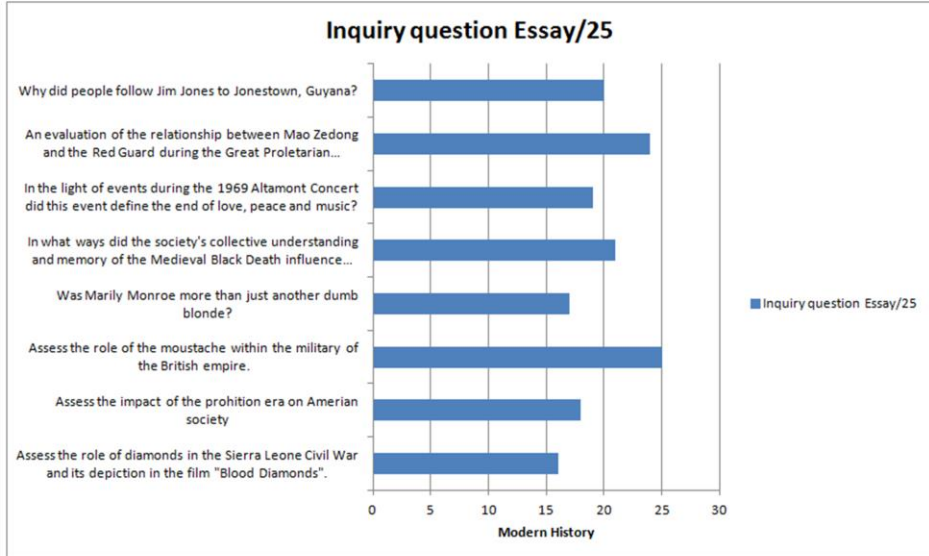
There is no awareness of the ISP.

Inquiry questions: Ancient

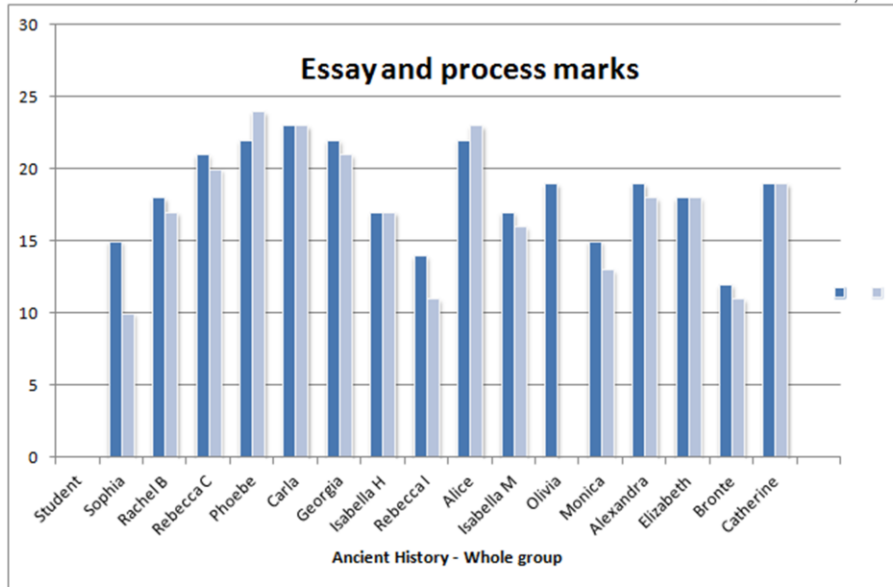


These are the questions the Ancient history teacher judged to be the most effective gained by those students.

Inquiry questions: Modern History



Marks: Ancient History



School of Information Studies

Pale blue is process

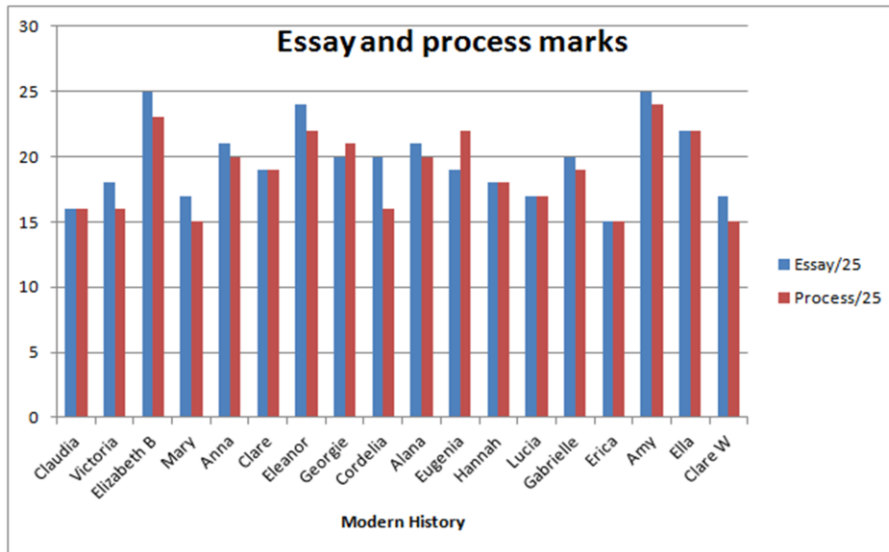
Dark blue is essay

It shows some alignment between process and essay, specially the top rangers, Phoebe, Alice, Carla and Georgia.

It shows lower marked students having correspondingly lower process grades: Monica, Rebecca, Bronte.

Other factors, which might be in Sophia's where her process was pretty awful, but her essay ok, can be good writing skills, and a good question.

Marks - Modern History



School of Information Studies

Process marks consisted of fewer steps than in the Ancient History.

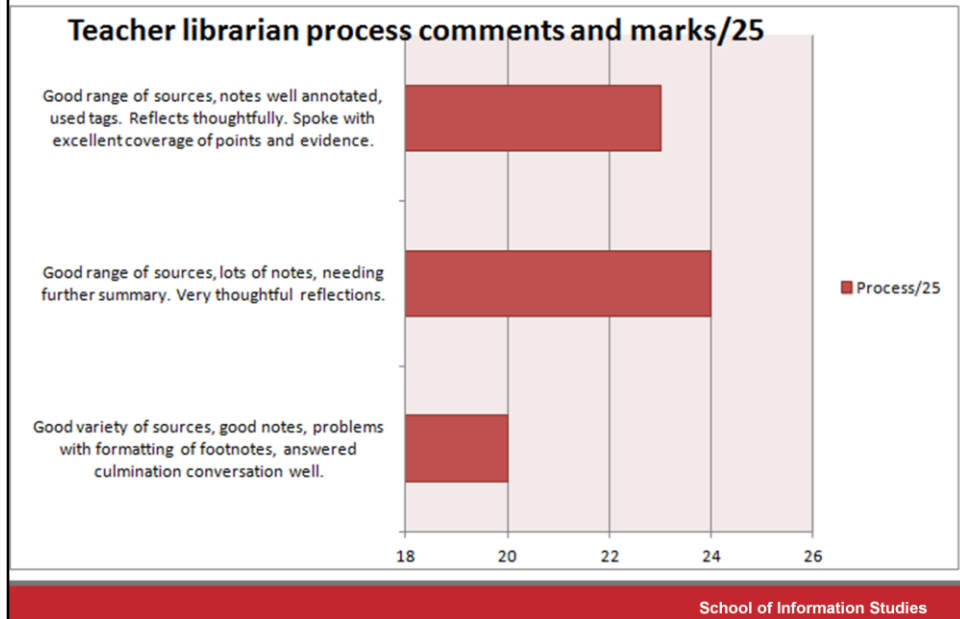
Students had to complete 3 reflections, take part in a culmination conversation, and do footnotes and a bibliography.

They were far less supported, did far less reflection, did not know about the ISP.

Striking thing about this graph is that process and essay marks are much closer than the Ancient History ones.

Process was assessed by the teacher, with no help from the TL. Likely to be much more cursory.

Marks – Teacher librarian comments



This is an extract from the TL reporting on process. This was done for every student, so that they had a clear breakdown on their process.

It mentions the culmination conversation, part of GI, where students are asked an impromptu question relating to the area they've just studied, and this is where they really show what they've learnt and how they've applied it.

Some of the culmination conversation questions were:

Is it possible to be both good and evil? Nero

Is it possible for an historian to write an objective account of History -Herodotus

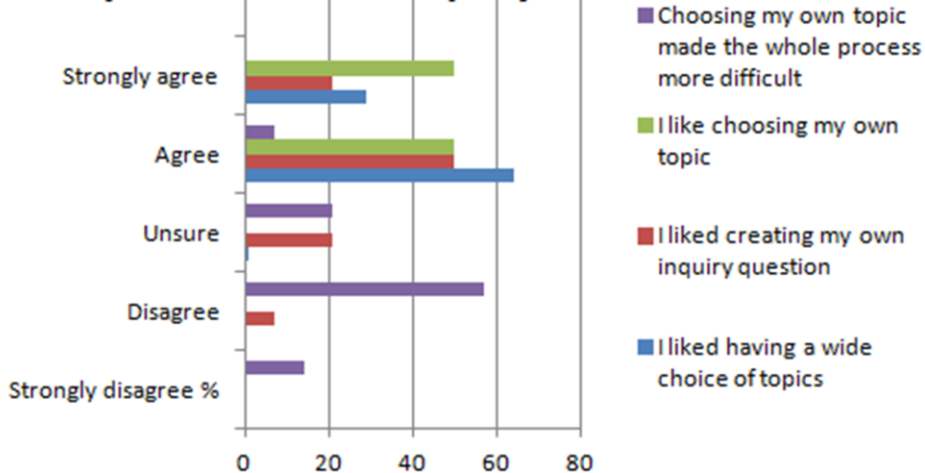
How can we understand ancient societies when we cannot read their writing? Thera

Why is ownership of the past so contentious?

Response to these questions were listened to by the TL and teacher and awarded a grade, which is part of their process marks.

Exit survey – Ancient History

The process of the inquiry



School of Information Studies

Just one question from the exit survey:

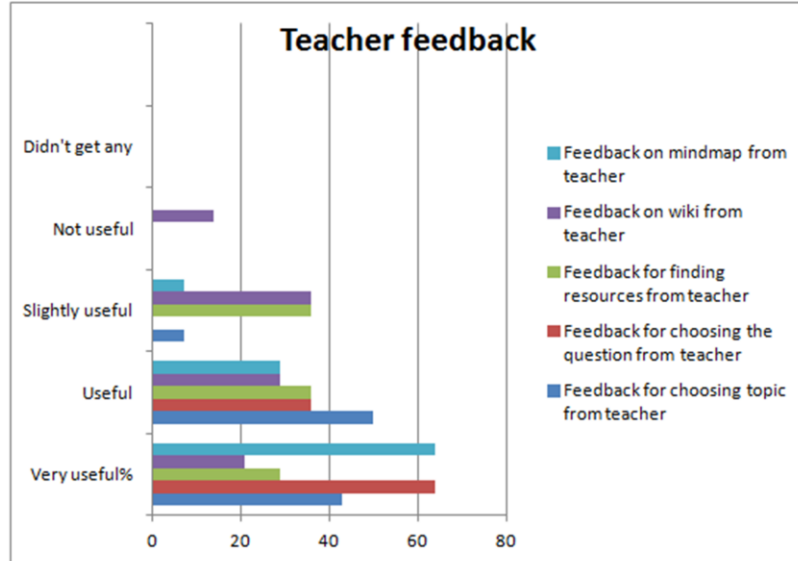
Shows that students strongly disagreed that choosing own topic made process more difficult.

All either strongly agreed or agreed that they liked choosing their own topic.

Re creating their inquiry question, more students were uncertain about this and they find it hard.

They all liked having a wide choice of topics.

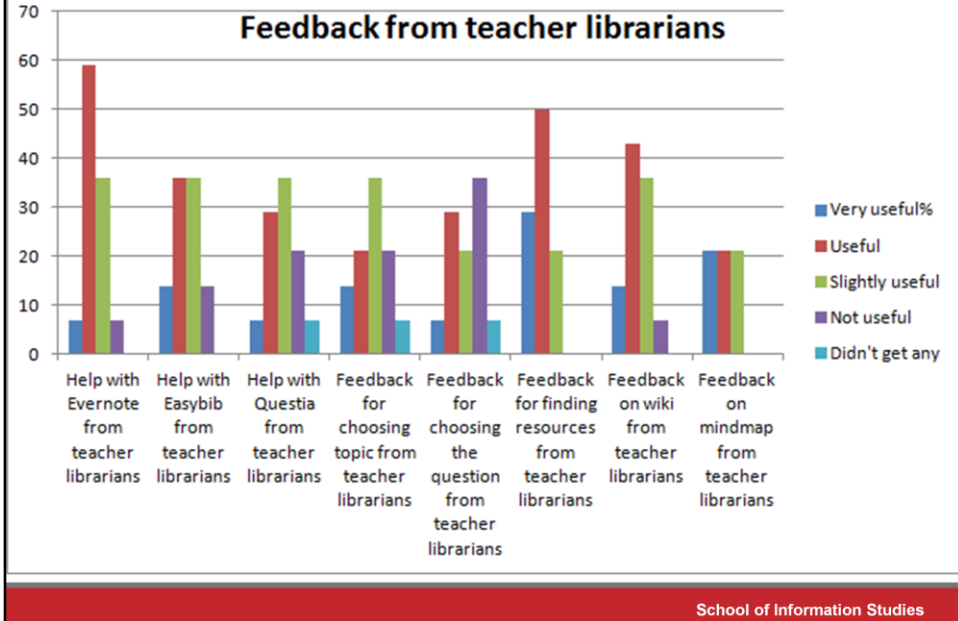
Exit survey



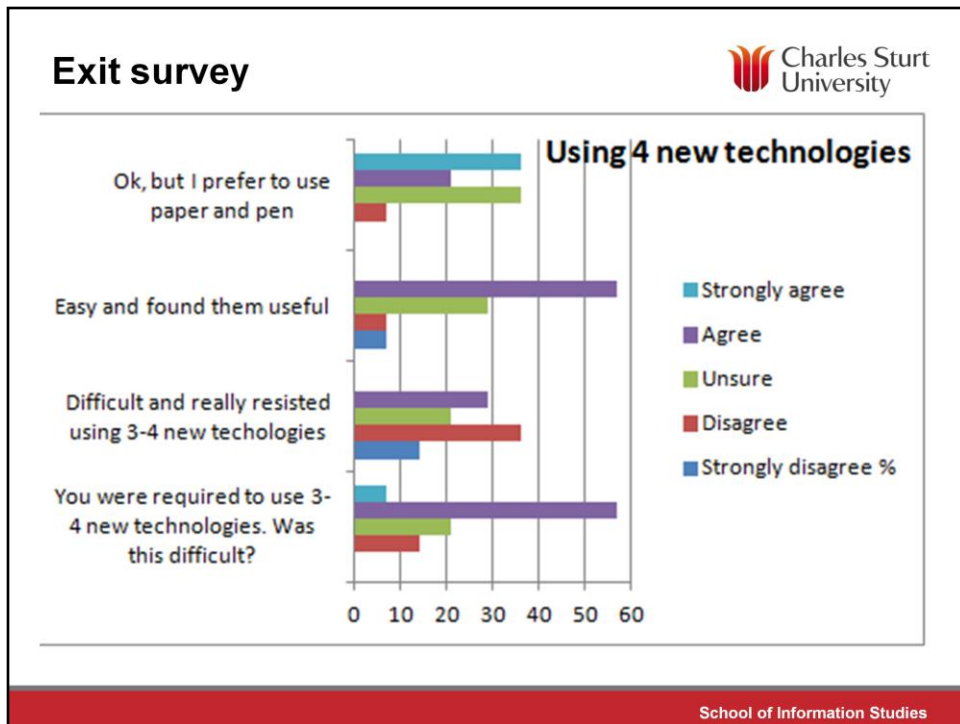
School of Information Studies

This shows students found feedback from their teacher useful, specially for creating question, and the mind map. Less useful were suggested resources and feedback on the wiki

Exit survey



This shows that students found feedback from TLs useful, never very useful! But useful for Evernote, finding resources and feedback on the wiki. Traditional roles really.



And lastly, students talking about the 4 new technologies they used – Evernote, Easybib, Webspiration and Questia

Other data shows that students say they will make these “technologies” part of their regular research use in this order:

Easybib

Evernote

Webspiration

And last by a long way, was Questia. Reflecting their difficulties with reading close text.

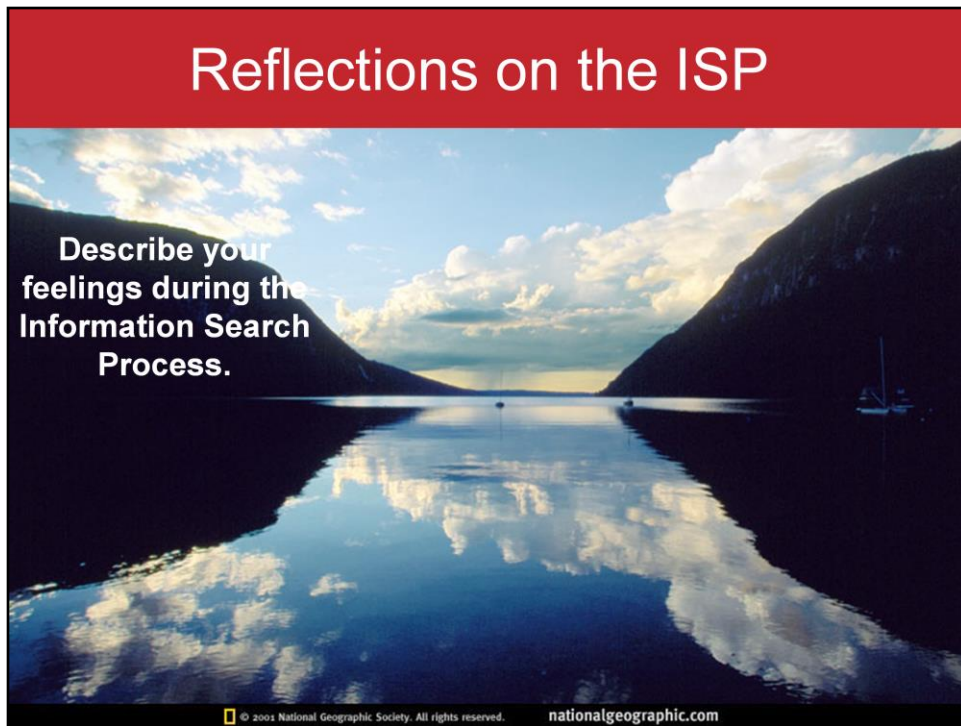
So this slide shows a high response to OK but I prefer to use paper and pen

Most agreed they were useful.

A significant number found them difficult and they resisted them.

The use of 3-4 new technologies, more than 50 per cent found difficult.

Interesting!



Open

I liked that we were also given complete freedom to choose what we liked, that way it was ensured that we were doing something that we found interesting, rather than something that was assigned.

Immerse

The Sea people were so fascinating to me and I couldn't wait to immerse myself in information about them. But.. I made sure to keep to overview information and not to immerse myself too greatly.

The true honeymoon stage! Basking in my decision to focus on Emperor Nero, I pursued various online encyclopaedias and websites and watched as many YouTube videos as I could, ranging from 5 minute summaries, to 40 minute documentaries, to Horrible Histories features. This was a great way to absorb information quickly whilst being entertained, and gave me a fantastic overview basis to envisage the path for exploration.

Explore:

This was the fun part of the assignment, where there was no imposed time limit on you or any sort of expectation/pressure (yet). I could actually just sit there hours on end just reading information about the Sea Peoples.

There was so much information! I did fall into a dip, in which I wished to change my topic as I felt that there was nothing controversial about Herodotus.

Identify

At this point it was clear that my area of interest was in how history had shaped the various portrayals of Alexander through time and the implications of this for our modern idea of who the ancient personality was.

I found this part quite challenging as it was really hard to narrow my choices down. But with the help of Ms Bleby, Ms FitzGerald and Ms Bognar it was easier for me to decide on my focus area.

Gather

When it was time to start gathering relevant information was when I had the most challenges in my research process. I found it extremely tedious and time consuming.

This stage really required active learning, and persistence

Create/Share

For me, the most challenging part of this whole process was the essay. I had talked over my mind map with Ms Bleby, which definitely helped the whole process and I had a definite idea of where my essay was going however getting all my ideas out of my head and onto paper was harder than anticipated. At this point I was feeling frustrated, and I just wanted the whole process to be over.

Evaluate

Throughout this whole topic I have had the chance to evaluate my research skills. The daily logs have been good in a sense as they have structured my reflection and given me key goals to complete both short term and long term. The weekly reflections have helped me to gauge the progression of my researching skills and have targeted particular aspects of my research which I have needed to keep up to date, such as my easybib.

Without realising it I have actually connected a few dots in my understanding of world history as Alexander's world is linked to the experiences of other people in history. It surprised me at how connected every event is despite seeming a long time ago. I'm very happy with my final essay.

Teacher feedback



What went well?

What difficulties did students experience?

Did students achieve deep knowledge of their topic?

What did they we and they had about their information process?

Which inquiry questions were the best/ worked less well?

Next time, we will....

School of Information Studies

What went well in this year's investigation? A smaller group enabled me to get round the girls somewhat more effectively than last year. As usual, having a buddy teacher librarian on the side.

What difficulties did students experience with any aspect of the inquiry?

Coming to terms with the nature of using historiography to support or direct arguments. Keeping to my timeline. They wanted to set up a question earlier and felt the first week or so of simply engaging in contextual reading was a waste of time. Too many new IT 'bits' to get their head around – [wiki/easybib/evernote/questia....](#), they didn't like completing daily logs - prefer it to be weekly log,

Did students achieve deep knowledge of their topic? Some- particular strong examples were Carla , Rebecca C, Alice I and to a lesser extent Phoebe C.

What do you think were the major learnings that we and they had about their information process?

To 'really' understand and build deep knowledge takes time – the AH/MH students commented the value of the extra time Anc had (as Mod cut back their time by a week). To be stronger earlier with certain topics that appeared to become too difficult for certain girls.

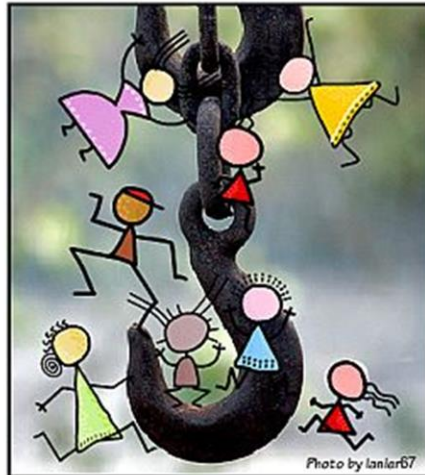
Were there questions that didn't work well? What was wrong with them? Questions relating to historiography didn't work well, because students need more input on historiography. Some didn't work because student did not realise the extent needed for effective research until it was too late. Less able students should not assess the historical reliability of a film, this is too challenging!

Next time, we will..... re-train to be a Maths teacher!!!?

Conclusions

++++

Does Guided Inquiry enhance learning
and metacognition?



<http://www.cmu.edu/teaching/principles/>

School of Information Studies

Does Guided Inquiry enhance learning and metacognition?

Resounding yes

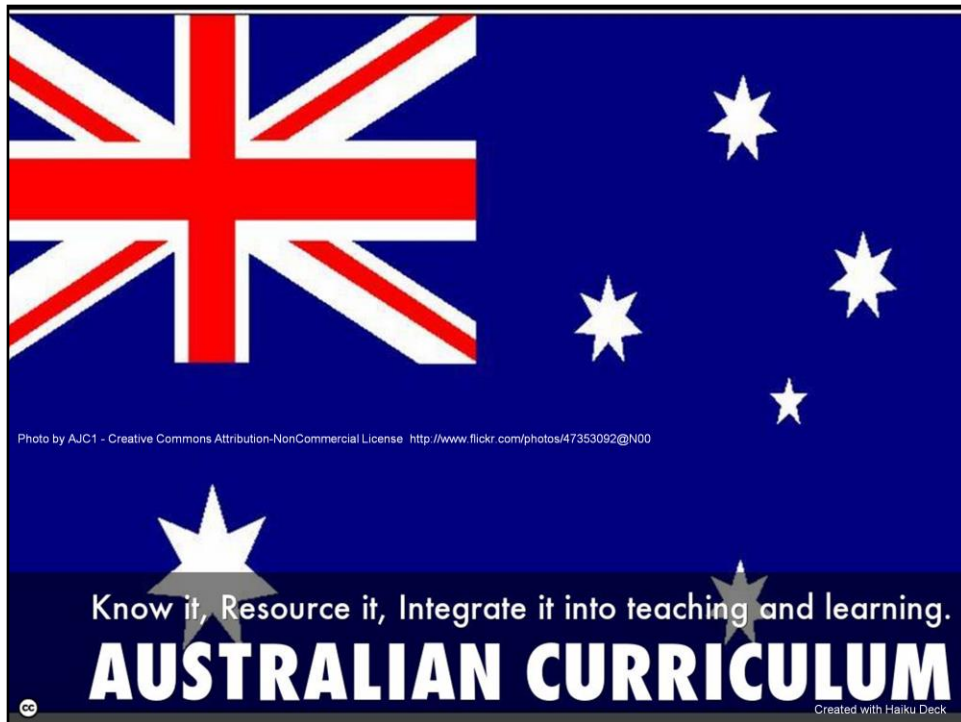
Deep learning:

Q1: Take some time to think about your topic was the question which demonstrates this, and the growth from facts to explanations to conclusions in the reflection sheets and in the essays proves this, with bells on!

The Culmination Conversation also demonstrated this, as girls were able to express knowledge about historical ideas relating to their content area very well.

Metacognition:


Students are definitely more aware of their own process of learning, and showed themselves adept at talking about the Information Search Process, and learnt a great deal about how to manage their process, what to expect whenever they do research.




The time is ripe for Guided Inquiry because of the Australian Curriculum's emphasis on 21st century skills.

TLs must know it, resource it, integrate it into teaching and learning.

How do teacher librarians meet the 7 AITSL standards?







School of Information Studies

TLs will be accredited under the Australian teaching standards – are beginning to be so.

We are accountable for the seven standards same as any other teacher

- Know students and how they learn
- Know the content and how to teach it
- Plan for and implement effective teaching and learning
- Assess, provide feedback and report on student learning

These are the four the GI gives the opportunity for TLs to meet.

Evidence based practice

Teachers have student results as evidence of the success of their teaching.

We can have this too. Quite simply, by **building process steps into the grading of any inquiry task.**

We can also use the **SLIM Toolkit** with an inquiry task.

It seems really simple to me!

And SLIM analysis from time to time . Not for the faint hearted!

And along comes Critical and Creative Thinking.....



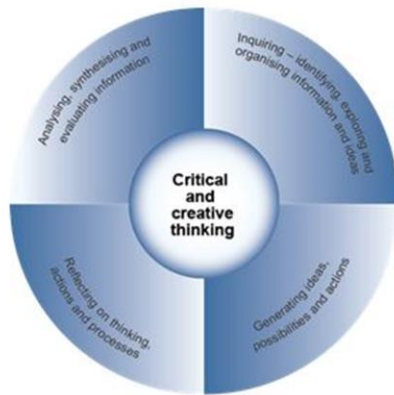
Guided Inquiry Design has made very much more concrete the operation of inquiry in a GI framework.

Its concepts tie in so clearly with Critical and Creative thinking capability.

We need to seize the day!

- Inquiring – identifying, exploring and organising information and ideas
- Generating ideas, possibilities and actions
- Reflecting on thinking and processes
- Analysing, synthesising and evaluating reasoning and procedures

The diagram below sets out these elements.



Four interrelated elements, each detailing differing aspects of thinking.

Each needs to be explicitly and simultaneously developed.

Organising elements for Critical and creative thinking

This is critical and creative thinking.

Alignment of CCT with ISP



This is the alignment between CCT and ISP – They fit each other like a glove!



So, we have the CCT General Capability, which reads like a blueprint for the ISP/GI Design process. But inquiry is scattered throughout our AC syllabuses in much more than CCT.

There are two people at least have been doing extensive work on locating and analysing inquiry in AC:

Mandy Lupton

Karen Bonanno

Mandy has just completed her analysis of all the available AC syllabuses, including newly released ones, and Karen has done a similar analysis, with the difference being that she has aligned the skills with the ISP/GI design process. I've been working with her to find the gaps in coverage (many!) and to describe the skills necessary for each stage of the ISP/GI Design process

Fundamentally, both analysts are discovering the lack of a process to hang information skills on, omissions of many skills, as well as a lack of alignment in when various skills are introduced.

It is for these reasons that the stars are aligned! There are huge opportunities for TLs in schools to provide a process and a pedagogy to hang the scattered inquiry skills onto, and to work with teachers to try to align the information skills in the various subjects.



Dr Mandy Lupton is Coordinator: Masters of Education (Teacher librarianship) at the Queensland University of Technology.

Main points of Mandy's analysis:

- It is important for teacher librarians to understand how inquiry is portrayed and sequenced in AC in order to work with classroom teachers to implement it.
 - The different nature of inquiry in the subjects studied, with Geography being the most sophisticated
 - There is uneven introduction and reinforcement of skills
- ACARA hasn't put inquiry skills into a pedagogical framework, so that teachers may be implementing AC without knowing how inquiry skills relate to inquiry learning



BLOG

• 11



<http://inquirylearningblog.wordpress.com/2014/05/12/inquiry-skills-across-the-australian-curriculum/>

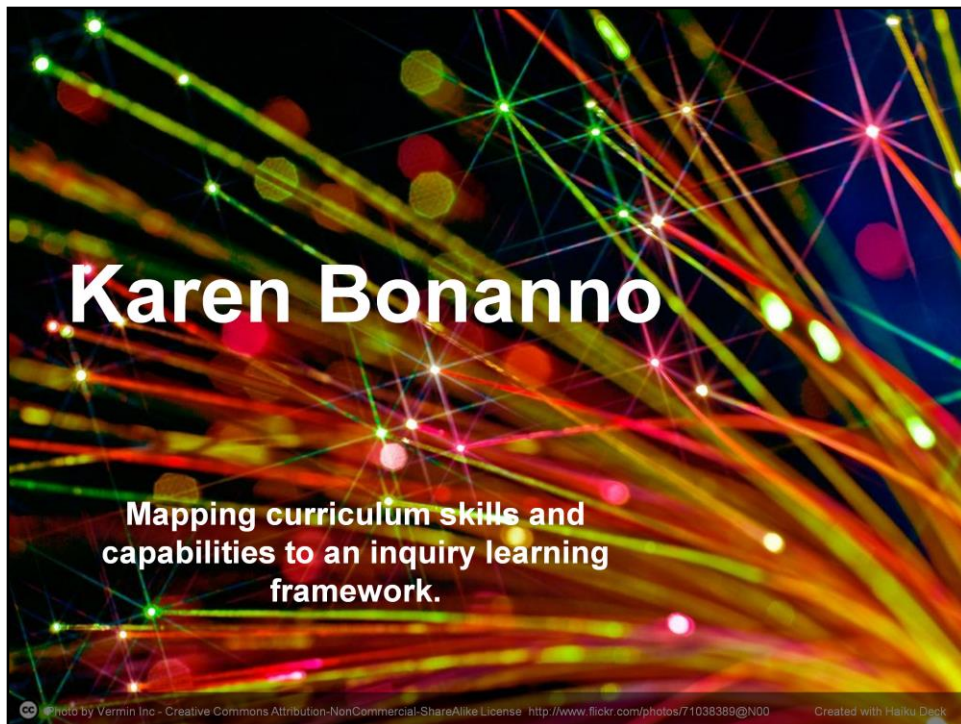


School of Information Studies

This is her most recent analysis available at her inquiry learning blog. Mandy has now extended her analysis to include the new syllabuses that have come out lately.

Inquiry skills and information literacy are embedded in the Australian Curriculum in the subject areas Science, History, Geography, Economics and Business (draft), Civics and Citizenship (draft), and in the general capabilities CCTand Information and ICT.

But they come with omissions of various stages as well as misalignments - e.g Year 7 Science requires students to independently plan whereas it's not until Year 9 in Geography that students independently design investigations.



Karen Bonanno is Managing Director of Eduwebinar, a PD development network , Chief Executive Officer of ASLA, and Executive Secretary for IASL
One of her webinars was the above, in which she talked about her process of mapping the inquiry skills so strongly evident in the Australian Curriculum.

Her objects were:

- to create a skills scope and sequence, within an inquiry learning framework:
- identify core essential inquiry skills across the curriculum,
- support sequential skill development,
- assist in the embedding of information literacy into classroom programs, and
- provide a framework for student engagement in inquiry learning.

In 2012, Karen Bonanno was given permission by the authors of [Guided Inquiry Design: A Framework for Inquiry in Your School](#), Carol Kuhlthau, Leslie Maniotes and Ann Caspari, to develop a collaborative project with Australian teacher librarians to develop a scope and sequence tying the five kinds of learning to the inquiry skills and capabilities in the Australian Curriculum.



This is the newly released document from Karen Bonanno of Edwebinar and long time advocate of teacher librarians and the difference they can make in student learning.

She's been investigating the AC to find out what inquiry skills are there, which ones aren't, and listing and describing the F-10 core skills and tools in inquiry learning. I've been helping her with this.

Find out more....

Welcome to the Australian Guided Inquiry Community!

On these pages, we present the theory and practice of Guided Inquiry, specially as it relates to the Australian Curriculum. As this is a community, we want to share developing knowledge and practice about Guided Inquiry.

Please contribute your experiences, units of work and scaffolds...

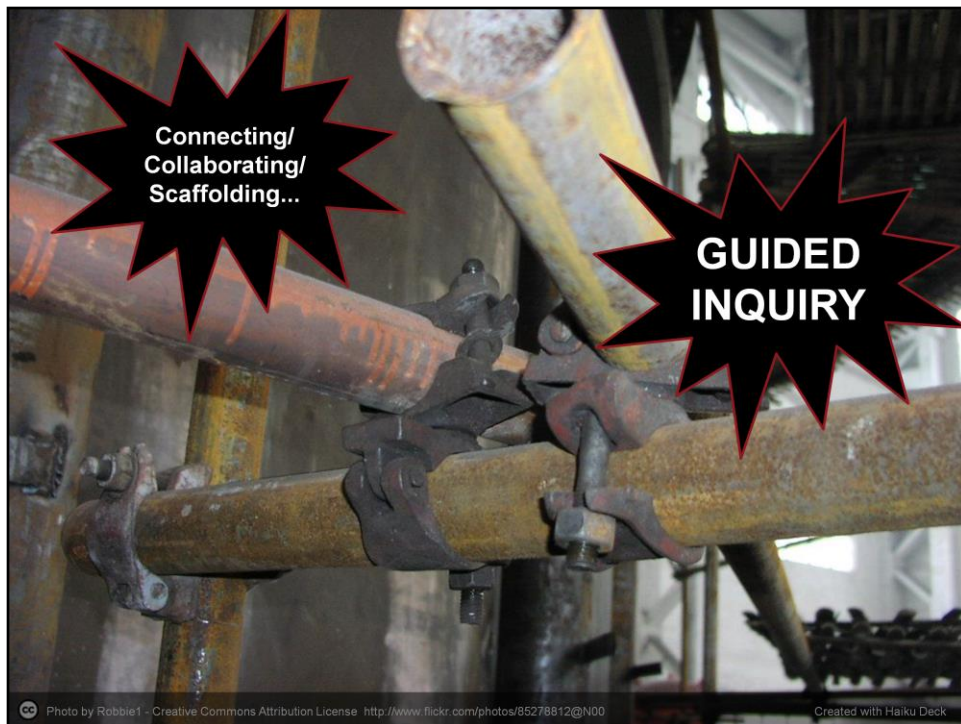
Click on the following to navigate our site:

<u>Australian curriculum and inquiry</u>	<u>Professional reading</u>
<u>Units of work - primary</u>	<u>Guided Inquiry presentations</u>
<u>Units of work - secondary</u>	<u>Evidence-based practice</u>

We are actively seeking your contributions, so that we can together build up a portfolio of best practice in Guided Inquiry.
Click on the icon below to chat with others who belong to this community, now numbering 372 people.



So, for TLs interested in how to get into this perfect situation for Inquiry learning, there needs to be professional development, and this is one of the means of getting it.



To return to the theme of today: School libraries making a difference – Connections and collaborations.

I believe that we can make a difference, be accountable to AITSL, help students make connections in their learning, and be the collaborative partner with teachers that we have for so long wanted to be.

Just use the scaffolding of inquiry learning that Guided Inquiry provides.