Critical thinking:
What students need to know

Judith Rochecouste
Being Critical – the big three!

Critically evaluate....

Critically analyse....

Critically review...
Critically evaluate – How?

• Evaluate it

• Value (Good? Bad?)

↓

• But against what criteria is it good or bad?
Critiquing is not criticising

To review or analyze critically:
- to evaluate (positively and negatively)
  against some criteria

Criticism (can be positive or negative)

Critique

Criteria
Critically analyse - Finding the internal structure to critique

An event: What is the internal structure of an event? – when, why, what happened before, what happened after....

A process: What is the internal structure of a process? – what if the order, could the order be better, should the process be shortened...

A theory: What is the internal structure of a theory? – how is it supported, is the evidence robust, valid, could it be replicated (further proven)....
### Critically Analysis - How

<table>
<thead>
<tr>
<th><strong>“Blink”</strong></th>
<th><strong>“Sing”</strong></th>
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<tbody>
<tr>
<td>• It’s involuntary.</td>
<td>• Singing has internal structure.</td>
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<tr>
<td>• It’s brief.</td>
<td>• We can sing in tune or out of tune.</td>
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<tr>
<td>• It’s repeated.</td>
<td>• We can sing a whole song or just a few notes.</td>
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<tr>
<td>• It does not have much internal structure – we don’t often talk of blinking slowly, elegantly, beautifully, etc.</td>
<td>• We can forget the words.</td>
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<td>• We don’t often analyse or evaluate blinks!</td>
<td>• We can sing a song romantically.</td>
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<td></td>
<td>• We can easily analyse singing because its internal structure is obvious.</td>
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Amphitheatre

Theory

Theorum

Theoretical

Photograph – Judith Rochecouste, Akropoli, 2005
Theory

- Research to support the theory
- Research to refute the theory
- Application of the theory

Generalisation

- Findings
  - Research

- Findings
  - Research

- Findings
  - Research

- Findings
  - Research
Critically review: Reading with a purpose

What is the internal structure of a paper?

• **Look** at the headings, learn where information is to be found in the paper

• **Scan the paper** *(read the first sentence in each paragraph, look for signposts like “however”, “firstly”, “finally”, “nonetheless; “therefore”, “as a result”, etc – they direct the argument within the writing)*

• **Look for detailed criteria** *(how was the research done, what happened)*

• **Reflect on big picture criteria** *(why was the research done and who for)*
To conclude...

- Critically analyse, evaluate, or review are highly complex skills – and they may need to be explicitly taught.