Two approaches to developing critical thinking using scenario and role-based learning

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Critical Thinking

• Critical thinking: not mission impossible, but possibly definition impossible
• Generic or discipline specific?
• Academic Skills Office:
  • We teach many transitional students
  • Briefed to teach CT
Dispositional nature of CT

• Higher ed. CT mainly focuses on *skills* – but to what end?
• *Disposition of truth seeking* important for us as teachers of transitional students
• Lack of objectivity (bias) and difficulty with complexity are hallmarks of early developmental stage students (Wolcott, 2006)
First cohort

• Wholly online 3\textsuperscript{rd} year foundation unit
• Cohort of professionals: entry by advanced standing
• Many ADF and NZDF personnel
• Feeds into leadership (business) and training (education) courses
• Course owners’ brief for unit:
  • Generic academic skills
  • \textit{Appropriate disposition} for research: consider objectivity and bias
Unit structure

• Online quizzes
• Annotated bibliography
• Role-play
• Reflection
• Traditional Essay

Thematic continuity through the theme of justice
Why role-play?

• Behavioural (evolutionary function) of argument is to persuade rather than seek the truth (Mercier and Sperber, 2011)
  – One explanation for confirmation bias and bias blindness

• Cognitive science shows that group evaluations provide an efficient way of holding confirmation bias in check.
Role-play in action

- The Deep End: Palestine/Israel (Gasp!)
- 4 roles:
  - Palestinian journalist
  - Israeli citizen
  - Ex-pat archaeologist living in Jerusalem
  - NGO worker
- Respond to trigger messages
  - short form writing (e.g., news stories, letters to the ed., ppt presentations)
- Reflective piece
Interactivity

• In different iterations of the unit:
  – None
  – Group in-character interaction
  – Group out-of-character interaction
  – Peer assessment
    • Reflection
    • Short form responses to trigger messages
Why it works

• Reflection on:
  – Role of researcher: skills and dispositions
  – Role of rhetoric and belief
  – Argument: evaluation, analysis, synthesis & construction

• Experience in:
  – Evaluation through teamwork
  – Research
  – Epistemic humility
  – Working with complexity

• By the time of the essay and (hopefully) beyond:
  – Pragmatic performing & strategic revisioning (Wolcott, 2006)
Second Cohort

• International ESL on-campus students in Business School
• Requires a carefully scaffolded approach because of language difficulties and cultural differences
A developmental model for critical thinking skills

“Steps for Better Thinking Performance Patterns” (Wolcott, 2006)

- Confused Fact-Finder (30%)
- Biased Jumper (57%)
- Perpetual Analyzer (13%)
- Pragmatic Performer (0%)
- Strategic Re-Visioner (0%)
Scenario-based assignment

- A student needing advice about improving his critical thinking skills
- Chaffee’s (2000) problem solving model
- Readings to show movement through the CT levels: Douglass, Malcolm X, Plato
the Fire
Roadway where puppet showmen perform
Prisoners
Shadows cast on this wall
ascent to Sunlight + diffused Sunlight
Why it works

• Non-confrontational approach of solving someone else’s problem
• Metacognitive tools provided by the Wolcott model give clear goals of what skills to practise in developmental order
• Explicit description of strategies for developing dispositions appropriate for university culture
References

(Pecha Kucha version – our real reference list contains 26 sources)

Douglass, F. (1845). Learning to read and write.
Plato. (ca. 380 BCE). The allegory of the cave.