The analytical lens: developing undergraduate students’ critical dispositions in undergraduate EAP writing courses

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Laetitia Monbec
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Outline

Aim of paper:

- to report on an interdisciplinary collaboration at the National University of Singapore between 2015 and 2017

- **Faculty program**: Undergraduate core modules and embedded interventions in collaboration with faculties across the university

- **Residential College Program**: Elective modules for University Town’s residential college students

- To show how a knowledge-oriented curriculum can be informed by complex theoretical frameworks such as Legitimation Code Theory.

- This type of curriculum can help to develop students’ critical dispositions.

- This is done by showing students how to apply analytical lenses to explore texts so that they may make informed judgements and read and write critically.
Three case studies

• Understanding and identifying types of knowledge (whether abstract or concrete OR content knowledge or personal experience) allows us to

  • to teach students how to create critically-engaged academic writing (*Mark Brooke*)

  • be more critically aware of what should be built into our EAP curricula to enable students to deconstruct language in text and to apply it in their own disciplines (*Laetitia Monbec*)

  • develop pedagogical material that is transferrable to students’ own critical writing (*Namala Tilakaratna*)
Recent BALEAP survey

• 40 BALEAP members (senior managers, sessional EAP practitioners; part-time EAP practitioners and 22 full-time practitioners)

• Are any of your courses informed by theory?

• 52% said their practices and the EAP courses they teach are informed by theory
• 18% indicate a negative answer
• 30% do not know

Genre theory (7 mentions)
Corpus Linguistics (5)
Systemic Functional Linguistics (5)
Academic Literacies (3)

In 2000, Moore wrote: ‘The curriculum of the future should be the curriculum of knowledge’ (p. 33)

e.g., independent learning ‘the social circumstances of knowers’ (Maton, 2014, p.5)

“Many EAP courses still lack a theoretical or research rationale” (Hyland, 2006, p.5).

‘grammatical accuracy instruction’

LEGITIMATION CODE THEORY
SPECIALIZATION + COSMOLOGIES
&
SEMANTICS

A framework to analyze knowledge in educational practices
Aims to make knowledge practices visible
5 dimensions: Autonomy, Density, Semantics, Specialisation and Temporality

http://www.legitimationcodetheory.com/framework.html
# LCT concepts for analysis

<table>
<thead>
<tr>
<th>Principle</th>
<th>Referent relations</th>
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<td>material density, moral density</td>
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<td>meaning</td>
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<td>temporal</td>
<td>temporal positioning, temporal orientation</td>
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Specialisation

• Specialisation “begins from the premise that every practice is oriented towards something or by someone” (Maton & Chen, 2015, p. 3).

• **Epistemic relations** (hereafter ER) (ER+/ER-)
  • Makes a distinction between practices and their object (that part of the world towards which they are oriented)
  • **Content knowledge** is emphasized as a determining form of legitimate educational knowledge

• **Social relations** (hereafter SR) (SR+/SR-)
  • Makes a distinction between practices and their subject (who is enacting the practices)
  • **Personal experience and emotions** are viewed a determining form of legitimate educational knowledge
Axiological cosmologies

‘Constitutive features of social fields that underlie the way social actors and practices are differentially characterized and valued’ (Maton, 2013, p.152)

Clusters → stance

Targets of evaluation (how) & targets (who)

Systemic functional linguistic framework of ‘APPRAISAL’ which codes evaluative meaning in English discourse
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Semantic gravity

‘The degree to which meaning relates to its context ... Semantic gravity may be relatively stronger (+) or weaker (–) along a continuum of strengths. The stronger the semantic gravity (SG+), the more closely meaning is related to its context; the weaker the gravity (SG–), the less dependent meaning is on its context’ (Maton, 2011, p. 65).

RELATIONS WITHIN KNOWLEDGE
Semantic gravity

- Degree of context-dependence of meaning

- May be stronger (+) or weaker (-) along a continuum of strengths

  - Weaker = less context-dependent (abstractness)
  - Stronger = more context-dependent (concreteness)

(Maton, 2013)
Semantic gravity

- **Weakening** semantic gravity
  - e.g. drawing generalising principles from the minute particulars of a specific context or case

- **Strengthening** semantic gravity
  - e.g. moving down from an abstracted concept to specifying delimited examples

(Maton, 2013)
Semantic profiles and ranges

(Maton 2013)
CASE STUDY 1

SEMANTIC GRAVITY TO TEACH STUDENTS HOW TO CREATE CRITICALLY-ENGAGED ACADEMIC WRITING

MARK BROOKE

How to use lenses for the theoretical framework section of an IMRD (Introduction, Methods, Research and Discussion) research paper
CONTEXT OF THE STUDY

• CLIL using specific content field to teach critical thinking and academic writing
• Sociology of sport
• Second year undergraduates from diverse academic disciplines and nationalities
• IMRD (2200 words)
• 15 students per class.
An example extract (text 1) considered weak during the pre-intervention stage, using the sampling criteria, is provided below:

**Race** is an important issue in American society and sport. **Critical Race Theory (CRT)** can be used to investigate **black athlete activism** in the American society. The **Take a Knee movement** was started by quarterback **Colin Kaepernick** who knelt in protest in **2016**. Kaepernick said: “I am not going to stand up to show pride in a flag for a country that oppresses black people and people of colour”. Protests were seen not only **at every NFL game** but also at **Wembley Stadium** in the **UK**. In London, 24 players also took a knee. Activists argue that black athletes have a responsibility to speak out on social issues and causes today. Thus, CRT can be used as a framework to challenge these inequalities and critique racism in sport.
Semantic profile and range

Racism in society & sport

Black athlete activism

Take a Knee movement

Wembley Stadium

Colin Kaepernick

CRT: Racism in sport

(Maton, 2013)
Critical Race Theory asserts that the **prevalence of racism** in America is due to its **majority white population**, and it is a construct deeply embedded in the **American society** (Agyemang, Singer & DeLorme, 2010; Ladson-Billings, 2004). It explains that the **laws in the US** are constructed against **people of colour**. These laws maintain **white supremacy** and the regime within the US despite the constitution guaranteeing **equal protection** to **people of colour**. In accordance with this, Agyemang, Singer, and DeLorme (2010) found through his interviews that **black male college students** are **aware of racism** in America. **They** understand that race would always be an ongoing issue and because of that, they may need to be cautious with **their words and actions**. As pointed out by Darnell (2012), **athletes face isolation** from their team or condemnation by their organisation for **promoting athlete activism**. Muhammad Ali, Tommie Smith, John Carlos and more recently, Colin Kaepernick, are **individuals** alienated due to their part in activism on the sporting stage (Todaro 2018). In contrast, a **white US Women National Football player Megan Rapinoe**, pledged her support for Kaepernick by **kneeling during the national anthem** but she was not met with any repercussions for her actions (Branum and Masland 2017). Therefore, it seems that the **isolation of athletes** is exacerbated due to **race** (Moore 2017). Nevertheless, **CRT activists** argue that **black athletes** have a responsibility to speak out today and to **challenge inequalities** and **critique racism through sport**.
Figure 2. Diagram of heuristic semantic gravity profile

- **SG-**
  - CRT & racism in US
  - Laws maintain white supremacy despite the Constitution
  - Black male college students
  - Athletes face isolation

- **SG+**
  - Ali, Smith, Carlos, Kaepernick versus Megan Rapinoe

- **Challenges**
  - Inequality and racism in US
  - CRT & athlete responsibility to protest
  - Isolation exacerbated due to race
QUALITATIVE FEEDBACK

• “It made me more aware of what I was lacking in my use of theory.”

• “It showed me exactly how to plan and write a paper.”

• “It gave me a very visual representation of how to write well.”

• “It showed me how to write a cohesive paragraph.”

• “It linked to the general-specific-general rule.”
CONCLUSION

- Educational evidence of critical thinking and how it links to academic writing
- Academic voice (appropriate tenor).
- Cohesion in writing.
CASE STUDY 2:

SPECIALIZATION & SEMANTIC GRAVITY FOR CURRICULUM DESIGN

LAETITIA MONBEC

EAP curricula to enable students to deconstruct language in text and to apply it in their own disciplines
Specialisation

• Analyse the value placed on knowledge in a discipline.
• Transfer is promoted by disciplines where knowledge is emphasized (made visible explicitly).
• Transfer may be hindered when knowledge is downplayed, less visible (Maton, 2014).

• What Knowledge about Language (KAL) should be promoted?
What should we teach to foster transfer?

The NUS EGAP module
- mixed disciplinary group (first years)
- 48 hours
- Year 1
- approx. 1200 students

Common core syllabus for mixed-disciplinary EAP groups
Life Science; Mathematics; Chemistry; Statistics; Business; Engineering
Aim of EAP modules: to support students academic literacy skills in their undergraduate programmes (Hyland & Hamp-Lyons, 2002)

- ‘Generic transferrable skills’ requirements across the disciplines are similar

- SYSTEMS are realized differently in various contexts

- Language skills
- Processes
- Study skills
## Bringing knowledge about language (KAL) into the EAP module

<table>
<thead>
<tr>
<th>4 toolkits</th>
<th>Resources</th>
<th>Realisations in the disciplines</th>
</tr>
</thead>
<tbody>
<tr>
<td>To create cohesive texts</td>
<td>Cohesion resources (macro/hyper-theme; thematic progression, general nouns, referencing...)</td>
<td></td>
</tr>
<tr>
<td>To pack dense and precise meanings from the disciplinary field</td>
<td>Nominalization; noun groups</td>
<td></td>
</tr>
<tr>
<td>To express stance and evaluation</td>
<td>APPRAISAL (Engagement resources in particular); modulation (commitment)</td>
<td></td>
</tr>
<tr>
<td>To express logical relations</td>
<td>The grammar of logical meaning</td>
<td></td>
</tr>
</tbody>
</table>
Adapted from Halliday, 1985, (pp. 159-175)

**Noun groups**

<table>
<thead>
<tr>
<th>Pre-modifier</th>
<th>Head</th>
<th>Post-modifier</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Deictic</strong></td>
<td><strong>Head</strong></td>
<td><strong>Post-modifier</strong></td>
</tr>
<tr>
<td>the</td>
<td>method</td>
<td></td>
</tr>
<tr>
<td>these</td>
<td>environments</td>
<td></td>
</tr>
<tr>
<td>this</td>
<td>volume</td>
<td></td>
</tr>
<tr>
<td>these</td>
<td>forms</td>
<td>of co-ownership</td>
</tr>
<tr>
<td>a</td>
<td>group</td>
<td>discussion</td>
</tr>
<tr>
<td></td>
<td></td>
<td>on the primacy of communal property</td>
</tr>
</tbody>
</table>

- **Pre-modifier**
  - Deictic
  - Numerative
  - Epithet
  - Classifier
- **Head**
- **Post-modifier**
  - Qualifier
<table>
<thead>
<tr>
<th>Function/Purpose: to express stance and evaluation</th>
<th>Linguistic systems and features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Showing caution with arguments and interpretation</td>
<td>Evaluation/Appraisal</td>
</tr>
<tr>
<td>Citing other authors</td>
<td></td>
</tr>
<tr>
<td><strong>Evaluation/Appraisal</strong></td>
<td></td>
</tr>
<tr>
<td>Hedging and Modality:</td>
<td></td>
</tr>
<tr>
<td>• Modals: may, might, could</td>
<td></td>
</tr>
<tr>
<td>• Adverbs: perhaps, probably</td>
<td></td>
</tr>
<tr>
<td>• Quantifiers: some</td>
<td></td>
</tr>
<tr>
<td>• Verbs: appear to + V/ seem to + V/ tend to + V</td>
<td></td>
</tr>
<tr>
<td>• Other expressions: x is likely to + V/ there’s a tendency for x to + V</td>
<td></td>
</tr>
<tr>
<td><strong>Reporting structures</strong></td>
<td></td>
</tr>
<tr>
<td>• The research report concludes that ... As Jones (2010) argues, ... According to Zhang (2009), ...</td>
<td></td>
</tr>
<tr>
<td><strong>Endorsing and distancing</strong></td>
<td></td>
</tr>
<tr>
<td>• Evaluative reporting verbs: claim, suggest, demonstrate ...</td>
<td></td>
</tr>
<tr>
<td>• Intensifying/limiting adverbs: clearly, unambiguously, strongly/ somewhat, to a certain extent</td>
<td></td>
</tr>
<tr>
<td>• Concessive clauses: although ... while.</td>
<td></td>
</tr>
</tbody>
</table>
Lucy, a year 1 Life Science student, discussed a Molecular Genetics module Lab report on Agarose Gel Electrophoresis in which she constructed complex noun groups and expressed a range of interpretative meanings.

For the “neat” sample of genomic DNA in lane 8 from Figure 1, the thick band found at 23, 130 base pair row indicates a high concentration of DNA fragments of that particular length. Perhaps if the gel was run for a longer time, there might be a thinner band of DNA molecules as larger DNA molecules require more time to move through the agarose gel. The region of fragments found to be smaller than or equal to 2,027 base pair can be seen as a smear, possibly due to contamination of RNA molecules in the undiluted sample of genomic DNA. Hence, RNA could have been extracted from the E.coli along with the genomic DNA.
EAP Syllabus on a Semantic Gravity Wave

Knowledge is contextualised through EAP tasks/Peer Review/Feedback and consultation/Assessment Rubric.

Knowledge is linked to disciplinary contexts through text analysis, discussions, presentations.

General, abstract knowledge about language and meaning-making in the disciplines.
Conclusion

• Specialization and Semantic Gravity can help teachers to analyse what in the curriculum may promote transfer.
• Knowledge of language (KAL) provides a lens for students to deconstruct & reconstruct text.
• Boosting (KAL) can promote transfer, even in quite different contexts.
To explore ‘axiological cosmologies’ to understand how evaluation forms clusters of meaning that enable the writer to create a persuasive expository text
Steps in enacting LCT

Public Writing and Communication

Aspects of applied Specialisation:
axiological clusters

genre structure & key linguistic patterns of:

• model expert texts
• student texts

Interweaving of evaluative claims, credible sources and personal opinion

Students produce a social action blog

Disciplinary literacy development:
• What is a ‘Social Action blog’?
• Marking criteria for Blog assignment
Flowchart of Learning Activities (genre pedagogy)

- Reading & analysing the blogs in class
- Writing the blog in class
- Peer Review
- Assignment submission

- Deconstruction
- Joint Construction
- Independent Construction
An authentic sample

AWARE

Single parents need more inclusive policies on public housing

February 15th, 2017 | Family and Divorce, News, Poverty and Inequality, Press Release

This post was originally published as a press release on 10 February 2017.

10 February 2017 – Public housing policies create serious difficulties for single parents and should be amended to be more inclusive, according to a report released by AWARE today.

The study (with accompanying Annexes) involved in-depth interviews with 55 single mothers and found 95% of interviewees who sought public housing faced problems, from unrealistic income ceilings and long debarment periods to a lack of transparency and clarity in policies. Their families experienced stress, uncertainty and financial pressure, with many reporting overcrowding and tension in relatives’ homes, and frustration with poorly explained and uncertain processes – such as the need for
Deconstruction and Modelling: Identifying positive/negative evaluation in social action blogs

Public housing policies create **serious difficulties** for single parents and should be amended to be **more inclusive**, according to a report released by AWARE today.

The study (with accompanying annexes) involved in-depth interviews with 55 single mothers and found 95% of interviewees who sought public housing faced **problems**, from **unrealistic** income ceilings and **long debarment** periods to a **lack of transparency** and **clarity** in policies. Their families experienced **stress**, **uncertainty** and **financial pressure**, with many reporting **overcrowding** and **tension** in relatives’ homes, and **frustration** with **poorly explained** and **uncertain** processes – such as the need for **multiple** applications or appeals to MPs.
Drawing attention to targets of negative evaluation: Who or what is the evaluation attributed to?

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### Guiding questions:

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<td>What is creating difficulties?</td>
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</tr>
<tr>
<td>faced problems</td>
<td>Who is facing problems?</td>
<td>Single mothers</td>
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<tr>
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<td>What kinds of problems?</td>
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# Evaluation & Target into LCT clusters...patterns of meaning

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**Policies and Processes**

**Single Mothers**
Student writing

Singapore’s efforts in the reintegration of ex-offenders into society are commendable. Organisations like the Singapore Corporation of Rehabilitative Enterprises (SCORE) have made a noteworthy impact on the employment rates of ex-offenders – in 2015 alone there was a 7.3% increase (Ng, 2017) in the percentage of employers working with SCORE to hire more ex-convicts. Moreover, the Yellow Ribbon project (YRP) has been lauded by the Penal Reform International (King 2012) for its events that aim to bridge the social distance between ex-offenders and the general public.
Yet while our reintegration methods have been praised as more progressive than most countries, in its international 2012 diagnostics of the reintegration of ex-inmates, the same organisation that praised our YRP, also criticised the Singapore justice system for being “incredibly punitive” (King 2012). As such, despite the efforts by the various organisations in Singapore, studies like the 2016 paper, “Factors Contributing towards Stigmatisation of Offenders in Singapore” (Tan, Chu, and Tan 2016), illuminate the still existing prejudice against ex-convicts.
Using Specialisation & ‘axiological cosmologies’

- Students initially found it difficult to shift from ‘academic writing’ to the ‘emotional appeals’ and personal subjective writing emphasized in social action blogs.
- Assignment guidelines lacked visible criteria that make explicit the requirements of making a ‘rhetorical appeal’.
- Modelling clusters from LCT helped make visible how authors create patterns of recurring meanings to create ‘persuasive’ writing in social blogs.
The analytical lens: developing undergraduate students’ critical dispositions in undergraduate EAP writing courses

• To show how a knowledge-oriented curriculum can be informed by complex theoretical frameworks such as Legitimation Code Theory.

• This type of curriculum can help to develop students’ critical dispositions.

• This is done by showing students how to apply analytical lenses to explore texts so that they may make informed judgements and read and write critically.
Further reading for Specialisation

Further reading for Semantics


Thank you