A Completely Different Ball Game:
Content and Language Integrated Learning through the Sociology of Sport

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Introduction
The objective of this paper is to report on a Content and Language Integrated Learning module entitled Sport and Competition within the broader field of the Sociology of Sport. In particular, it presents classroom instructional activities developed over a period of 8 months to guide students to notice and manipulate language in context. The rationale based on Second Language Acquisition Theory behind these is then discussed. It is believed that while on-task, focusing on these activities in the classroom, intentional and incidental learning of the target content-specific language (bricks) and general cross-curricular academic language (mortar) occurs (Dutro & Moran, 2003). In addition, CLIL courses can enable students to become more aware of transferrable academic literacy skills desired for academic study in multiple disciplines. This is particularly significant for first year undergraduates embarking on intensive study, which is the context for this paper. One of the implications of this paper is that teachers of like or other disciplines could gain insights for their own classrooms, and even enter into professional dialogue regarding these. Based on these objectives, this paper will present those tasks facilitated for deconstructing academic expository texts (to prepare for writing) in order to carry out written assignments. The skills taught at the lexico-grammatical level were concordancing; mind mapping and concept mapping; and at the discourse level, argument mapping and analysing persuasive appeal. These were facilitated to prepare students for writing academic genres such as summaries, comparison papers and academic persuasive essays. Participants (6 groups of 12 students over 2 semesters) explicitly stated in their end of course feedback that they saw these skills as highly valuable as they became more aware of the possibility of transferring them across disciplines to their other subject learning.
Background

Singapore is a multi-ethnic, multicultural, and multilingual society with four official languages: Mandarin, English, Malay and Tamil. In order to maximise cohabitation and collaboration between these ethnic groups, English was chosen as the common language of the nation and introduced as the medium of instruction in schools and universities. As a result, many Singaporeans proceeding from school into university have strong proficiency in academic English. The majority are able to function effectively in an English medium classroom environment. CLIL, in this context, is presented as an educational model in which English is used as a lingua franca for academic purposes.

The Ideas and Exposition Programme (IEP) run by the Centre of English Language Communication at the National University of Singapore adopts CLIL practice. CLIL is a dual-focused educational approach in which an additional language is used for the learning and teaching of content and language with the objective of promoting both content and language mastery to pre-defined levels (Marsh et al., 2010, p. 11). These academic writing courses are primarily taught by content specialists (lecturers with PhDs in sociolinguistics, film, literature, cultural studies and bioethics). Modules include topics such as critical approaches to photography; the construction of public personas; a study on Singlish and intercultural communication; and an analysis of heroes and their construction in ancient and contemporary societies. The module presented, as noted, is entitled Sport and Competition, and its purpose is to provide a sociological interpretation of sport as a cultural global phenomenon, with a particular focus on the emergence and growth of ultra-competitive, elite modern sports and the detrimental side effects of this, such as the deviant subculture of doping.

The course description is provided below. The conceptual content of the course is presented at this point in the paper because it is necessary for readers to be familiar with it in order to fully understand the data in the results section and the discussions.

“Is winning everything? Should participation or self-defining achievement be more valued? Is sport becoming too elitist? Does the obsession to win create the need for performance-enhancing drugs? Should we legalize doping or tighten control measures? Should we change the nature of professional competitive sport?”
As noted, the course is a sociological analysis of sport as a cultural phenomenon in society. In this field, sociologists argue over questions such as whether sport in modernity has lost its social and ludic functions, considered both as innate human characteristics. Today, rather than encouraging participation in sport, humans are more often than not spectators of an elite sport system that is overcome by extrinsic rewards, competition, dominance and conquest; competitive sport is also highly bureaucratized and standardized, and athletes are more often than not extremely specialized in their sport. This is a very different model of sport to that first practised at the Greek Olympics (776 BC), during which races were not timed. This sporting culture, referred to by Coakley (2009) as the power and performance model, is defined as:

“a framework for an organizational structure emphasizing hierarchical leadership, exclusive participation, and the use of strength, speed, and power to push human limits and dominate opponents in the quest for competitive success” (p. 675).

Its nemesis, what Coakley refers to as the pleasure and participation model consisting of sporting practices that still retain their ludic elements, is consciously resistant to the more common global elite sport culture. This model is:

“a framework for an organizational structure emphasizing democratic leadership, inclusive participation, and the use of cooperation and competition with others to develop and test skills in a healthy and enjoyable context” (Coakley, 2009, p. 674).

These are considered not merely as sports but as counter-hegemonic forces opposing the dominant culture of the elite professional sporting milieu. In reality the distinction is not black and white but forms two ends of a continuum: some sports such as the National Football League or Mixed Martial Arts are at one extreme, while ‘pick-up’ games and non-competitive sporting activities such as Tai Chi might be interpreted as being at the other. It is necessary to explicate this distinction as it is used as the basis of the topic for the tasks outlined in the results.
A core set of twelve scholarly research articles from content-specific journals in the fields of the sociology of sport, sport science and medicine discourse communities was constructed as the syllabus. These included an introductory paper from the Blackwell Encyclopedia of Sociology by Loy and Coakley (2009) entitled ‘Sport’ and then more specialised topics taken from The Sociology of Sport Journal, The Journal of Sport Behavior, International Review for the Sociology of Sport, International Review of Sport Sociology, British Journal of Sports Medicine, and Sports Medicine. In addition, two book chapters from Coakley and Dunning’s (2006) Handbook of Sports Studies and Eitzen’s (2005) Sport in Contemporary Society were selected for the text corpus. It is a twelve-week course only, with around forty-eight contact hours and a relatively high lexico-grammatical input and student output requirement.

The development of this syllabus occurred through a construction process and the noticing of connections between texts, either from in-text citation or the reference sections of journal papers. This connectivity is referred to as intertextuality, coined by Kristeva (1966, 1970). Intertextuality in discourse communities refers to the combining of past writings into original, new pieces of text. The premise is that all texts within a particular discourse community tend to be related to prior texts through a more or less complex network. Writers, often within a specific discourse community, may or may not be aware of the extent of this network but they do, on the whole, borrow, reinterpret and accumulate what has previously been written within a given context. Thus, there is a progressive assimilation of new knowledge into old. A text’s capacity to be present in other texts is referred to as iterability. One such example is offered by Porter who argues that the Declaration of Independence was borrowed from Locke’s Social Contract Theory, the Declaration of Rights for Virginia by George Mason, and the English Bill of Rights in 1689. The starting point for the corpus for Sport and Competition was the Blackwell Encyclopedia of Sociology, which not only served as a good introduction to the topic but also a literature survey. From this point, concepts or references were signaled to other texts, and this allowed for the identification of related readings leading to the construction of a body of texts suitable for the syllabus.

Theoretical underpinnings of the module and classroom practice

CLIL and Second Language Acquisition Theory

Much has been written about the benefits of the CLIL classroom as a language-acquisition-rich environment (Marsh et al., 2010; Marsh and Frigols, 2013). In particular, the
effectiveness of CLIL instruction in developing larger receptive and productive lexicons has been widely reported (Jexenflicker & Dalton-Puffer, 2010; Lo & Murphy, 2010; Ruiz de Zarobe, 2011; Zydatiß, 2007). This is predominantly due to the cognitively challenging and holistic approach taken to curriculum design and instruction (Baetens-Beardsmore, 2008). The approach is in accordance with Krashen’s (1981) acquisition-learning hypothesis, which argues that acquisition occurs as a natural process in context and this is contrasted to the formal learning of syntax or phonology. Based on this premise, if learners are provided with appropriate comprehensible input (i+1) in the classroom, as they are in their natural environments, the lexico-grammatical structures that the learners are ready to learn can be absorbed.

This teacher-researcher acknowledges the worth of Krashen’s i+1 hypothesis. However, for formal academic English, and specific content-based language, I also hold that learners need instruction; it is not sufficient to solely provide input. For Schmidt (2010), awareness is synonymous with Krashen’s notion of acquisition, for it is an intuitive understanding or a higher level of knowledge, assimilated through adequate exposure. However, Schmidt (ibid) argues that in the process of building a language knowledge structure, two other intra-mental states are at work. These are intention and attention (Schmidt, 2010). Intention is the user’s need to purposefully notice and focus on particular aspects of language or information in order to understand a text. Attention is the follow-on stage from intention. In this case, the learner deliberately decides to systematically study what has been noticed. Thus, in language learning, attention to acquire vocabulary, as is often the case for content-specific courses, involves the conscious study of collocation, superordination and connotation, and other notions that lead to the realization of meaning. Thus, according to Van Lier, the process of knowledge construction can only really commence when a realization of what to look for has been achieved:

To learn something new one must first notice it. This noticing is an awareness of its existence, obtained and enhanced by paying attention to it. Paying attention is focusing one’s consciousness, or pointing one’s perceptual powers in the right direction, and making mental ‘energy’ available for processing. (Van Lier, 1996, p. 11)
When dealing with groups of students who are both first and second language learners in the same classroom, having a rich reading corpus such as the scholarly research articles listed above is essential if acquisition is to be facilitated. In addition, intention and attention can be facilitated by focusing on activities that require learners in groups to deconstruct texts and negotiate meanings. A skilled tutor is able to make good use of a text to guide learners to notice language and develop students’ linguistic repertoires. Tutors can provide activities “which encourage students to think about samples of language and to draw their own conclusions about how the language works.” (Willis, 1996, p.63).

Thus, although students are individually assimilating the language, the tutor has directed their intention and attention. In addition, and in accordance with Willis, if students themselves are given the responsibility of analysing a text to create their own corpus, the pedagogy becomes a form of ‘data-driven learning’ (Johns, 1991), where the data are primary and the teacher has a new role as a coordinator of research, or facilitator of awareness-raising.

**Content-specific and general cross-curricular academic language**

A lexical approach (Lewis, 1993; Nattinger & DeCarrico, 1992; Sinclair, 1991; Thornbury, 2004; Willis, 1990) was one of the main strategies applied for the course and materials design, particularly for the first of three units. In other words, the content objectives of the course focused on the lexico-grammar of the field, i.e. its collocations (e.g., gender equity) and lexical phrases (e.g., a zero-sum ludic encounter). These were to be learned and used for communicative purposes, particularly for academic writing.* These language chunks have also been referred to as ‘sentence frames’ or ‘institutional utterances’ (Lewis, 1993, pp. 92-95), and ‘pre-fabricated lexical phrases’ (Nattinger & DeCarrico, 1992, p.1?) or, as used for this paper, lexemes. According to Crystal (2003, p.118), “A lexeme is a unit of lexical meaning, which exists regardless of any inflectional endings it may have or the number of words it may contain.”

Dutro and Moran’s (2003) bricks and mortar metaphor is often applied to describe the connection between general cross-curricular academic language and content-specific language. This can be seen in Figure 1 below, taken from Zwiers (2008, p. 21).
Figure 1: Overlapping variations of language that develop over time

The dotted line in the figure represents the first or foundational level of language use. From that point, language learning develops exponentially and becomes more focused as the learner develops a particular knowledge area. The mortar words are used to link general academic language with content-specific language from subject areas. Examples of common academic mortar lexemes or those found in general cross-curricular academic language are *that is to say; leads us to believe; is dependent on*. Another common source where 570 academic word families can be found is at the *Academic Word List* compiled by Coxhead [http://www.victoria.ac.nz/lals/resources/academicwordlist/](http://www.victoria.ac.nz/lals/resources/academicwordlist/). Examples of the most common of these (from sublist 1 of 10) are *analyse, major, structure, source, authority, significant, method, sector, legislate, section, assume, legal, vary, theory, and assess*. In order for learners
to perform well in a course of the type described in this paper, students are required to use both bricks and mortar effectively. As already noted, the genre types assessed are text summary-response, comparative paper and an academic persuasive essay (APE).

**Classroom activities**

The activities presented in this paper are (i) creating concordances, (ii) mind mapping, (iii) concept mapping, (iv) argument mapping and (v) analyzing persuasive appeals. The creating concordances, mind mapping, and concept mapping can be seen as learning activities that occur at the lexico-grammatical level. The argument mapping and analyzing persuasive appeals occur at the discourse level as they involve analysing whole clauses. In this teacher-researcher’s opinion, each of these activities should not have a long duration in class because good pacing of collaborative activities of this nature keeps students involved and on task. In addition, requiring learners to present the data that they have created in the classroom is an effective strategy for CLIL because learners are required to use the language to communicate about their work. For all of these activities, it is preferable that learners do not read aloud from the text where the items are embedded but use their own grammars (more or less) to paraphrase while using the text as a scaffold.

**Concordancing**

By searching for words in a particular text, sentences containing that word can be found creating concordances. A *concordance* is “a collection of the occurrences of a word-form, each in its textual environment” (Sinclair, 1991, p. 32). A set of lexico-grammatical items can be constructed by inputting a text into a tool such as Wordsmith or an online concordancer (through which texts can be first uploaded) found on sites such as the British National Corpus (BNC). One particularly effective method of concordancing is creating a list of content-specific language by searching for nominal constructions attached to ‘a/ an’ or ‘the’ in a relatively dense, content-specific text. This will provide strings of phrases and collocations (lexemes) making up nominal constructions from the field producing an extensive list of vocabulary, in this case, relating to the sociology of sport.

In order to commence the building of the field, students were initially required to make concordances using ‘a/ an’ or ‘the’ from an introductory paper by Loy and Coakley (2009) entitled ‘Sport’ in the *Blackwell Encyclopedia of Sociology*. This provided a sound
foundation of nominal constructions of the content-specific language. Example tokens selected by one group of students to describe sport as a sociological phenomenon having uploaded one section of the text into the BNC concordancer are provided below:

A parody of emotional vulnerability
A universal hegemonic trend of standardization and globalization of sport practices
An expressive ubiquitous social phenomenon of great magnitude and complexity
A basic, socially-induced desire to experience enjoyable mimetic excitement (without the risks and tensions of real life struggle)
A monolithic global sport culture
A zero-sum ludic encounter

Students brought these lexemes up on the class projector or wrote them out on the board and explained their meanings. During this activity, learners typically have to compare these particular strings with others used in the text; for example, ‘an expressive phenomenon’ (predominantly a ‘pleasure and participation model’) can be juxtaposed with ‘an instrumental’ one (predominantly a ‘power and performance model’); in other words, as already noted, sport can be both process, done solely for ludic purposes, and product-oriented conducted to win, break records or earn money and fame; a bias towards one or the other will depend on the context in which the sport is being played.

Mind mapping

Formal mind mapping techniques commenced with Buzan. On his website, he states:

A Mind map is a powerful graphic technique which provides a universal key to unlock the potential of the brain. It harnesses the full range of cortical skills – word, image, number, logic, rhythm, colour and spatial awareness – in a single, uniquely powerful manner. In so doing, it gives you the freedom to roam the infinite expanses of your brain.

Mind mapping is a ‘visual, non-linear representation of ideas and their relationships’ (Biktimirov and Nilson, 2006, p. 1). In other words, a mind map can arrange information spatially in ways that text normally does not. This enables learners to explore associations between lexico-grammatical items. It is a strategy common to diverse academic disciplines.
e.g., Finance (Biktimirov & Nilson, 2006), Economics (Nettleship, 1992), Optometry (McClain, 1987) and Medicine (Farrand, Hussain & Hennessy, 2002a). Mind mapping has an important function in brain-based theories of learning related to the constitution of the mental lexicon, the mental system comprising all information someone knows about words (Richards & Schmidt, 2002). It is probable that semantic relations such as those represented in mind maps are some of the most prominent information networks constructed in the brain. In the classroom, the practice is particularly effective for brainstorming or conducting an initial mining of a text to find words that are semantically connected allowing for free, creative thinking to construct associations.

Once the content-specific lexemes had been identified through concordancing, students were asked to associate the terms that had emerged with the pleasure and participation and power and performance models, which had been presented in class, and to create a mind map. Some students used Word or PowerPoint SmartArt to do this. Buzan’s software (http://thinkbuzan.com/products/imindmap/) is also an excellent tool for mind mapping. Through this activity, students became more aware of the issues associated with these two models within this specific field. When these were complete, they were presented and compared between groups. During this sharing, groups continued to extend their own structures based on peer and tutor feedback, thus learning collaboratively. An example from a group is provided below in Figure 2.
Figure 2: Associations in the field of the sociology of sport
**Concept mapping**

Concept maps are attributed to Novak (1972) and his work on teaching children science concepts (Novak & Canas, 2006). Consequently, they are sometimes referred to as ‘Novakian maps.’ Although the mind map in Figure 2 presents the conceptual notions ‘pleasure and participation’ and ‘power and performance’ sport models, it is not clear that these are superordinates, nor is it clear what some of the complexities of meanings between these terms are. Complex topics of this nature require relational analysis and concept mapping facilitates this. A concept map has a hierarchical “tree” structure with superordinate and subordinate parts (primary, secondary and tertiary ideas) and suitable cross-links using verbs and prepositions or prepositional phrases are frequently applied to present the relationship between the key concepts. Concept mapping is used in diverse disciplines e.g., Accounting (Chei-Chang 2008); Engineering (Walker & King 2002), Nursing (King & Shell 2002); and Medicine (Hoffman et al. 2002).

In figure 3, an extract from a concept map provided by learners represents some perceived hierarchies between concepts. Here, *extrinsically motivated* is considered one of the most essential composites of the ‘power and performance’ model, and extrinsic motivations nurtured the more an activity is instrumental rather than expressive in nature. Rather than a process-oriented approach to play because one enjoys it, there is a *product-oriented approach, one driven by revenue-based rewards and media coverage*. In addition, as there is a uniform, globalized structure of sport practices, also referred to as the *sportification* process, events are formally structured and rationalized for efficiency and effectiveness. As learners construct this visual, they need to negotiate conceptual meanings together and find congruence. There is thus a deep understanding of the lexemes’ meanings.
Several studies have demonstrated that argument mapping can have a significant impact on undergraduate student learning, especially involving improvements in critical thinking (Twardy 2004; van Gelder et al. 2004). Argument mapping is another visualising strategy but at the discourse level. The focus is on analysing claims and how they are connected in an expository text. Similarly to concept mapping, argument mapping has a hierarchical form in that the main proposition is numbered 1, and claims supporting or objecting this are offered as other numbers depending on the inferred importance of these within the text. This technique can help students to understand complex argumentation by analysing the logical structures of the reasoning in a text, and creating diagrams to capture them.

An example of a student’s summary of claims taken from an academic journal paper (Spriggs et al., 2005, pp. 112-113) which was presented in class as part of a text deconstruction activity is provided below. The section of the paper summarised analyses one aspect of the argumentation concerning the proposition that performance enhancing drugs in sport should not be legalized.

![Concept Mapping of Power and Performance Model](image-url)
**Student’s summary**

[1. No performance enhancing drugs (PEDs) should be legalised.] First, [2. athletes should represent positive social values such as excellence and dedication in because [3. the youth idolizes some sporting greats. Second, [4. PEDs are dangerous; due to genotypic differences, a diverse unpredictable range of physiological responses can be expected. Indeed, as stated by the President’s council on bioethics, [5. no biological agent powerful enough to induce major bodily alterations can be entirely trustworthy or without side effects. Third, although [6. Tannsjo (2004) argues that poorer nations would be advantaged, [7. this is difficult to believe as their athletes would not have the same kind of medical entourage as their richer counterparts].

The logical reasoning in this group of claims has been broken down into an argument map in figure 4. The numbers represent the ordering of the claims.

![Argument Mapping](image)

*Figure 4: Argument Mapping of Spriggs et al (2005, pp. 112-113)*

The argument defends the proposition that PEDs should not be legalised (1). At the first level, there is the contention that athletes are role models (2) with the supporting evidence that some youths idolize their favourite sports person (3). There is also the contention that these drugs are inherently dangerous (4) with supporting evidence for this (5). Then there is an objection to an objection, a rebuttal (7), regarding an opponent’s claim (6). For this activity,
content-specific language is used (performance enhancing drugs; genotypic differences) in context as entire clauses from the text are paraphrased in order to present the claims.

**Analyzing persuasive appeal**

In writing premises and claims in the expository genre, authors appeal to reason through the application of evidence and logic to persuade. This can be referred to as *appealing to logos*. Authors also seek to persuade by eliciting a reader’s emotions (*appealing to pathos*), and to demonstrate that they are knowledgeable in the field under discussion and thus have good judgment (*appealing to ethos*). These three perspectives for constructing claims are important as writers use them to anticipate how their readers will respond to an argument; in particular, whether they will be sympathetic or antagonistic towards it. These engagement strategies in argumentation are derived from ancient Greek writers, in particular Aristotle. Analysing persuasive appeal in text is not only commonly used in ESL tertiary courses (Kibler, Walqui & Bunch, 2014) but also in other fields such as Law (Berger, 2010).

Working with an argument map such as the one above, learners can be asked to extend it by discerning the kind of appeals being used by the author. The following was pinpointed by this teacher-researcher in classroom as an example. Notice that a table has been used to aid the presentation spatially.

<table>
<thead>
<tr>
<th>Pathos</th>
<th><em>Athletes should represent positive social values</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>Logos</td>
<td><em>Due to genotypic differences, a diverse unpredictable range of physiological responses can be expected</em></td>
</tr>
<tr>
<td>Ethos</td>
<td><em>Indeed, as stated by the President’s council on bioethics, no biological agent powerful enough to induce major bodily alterations can be entirely trustworthy or without side effects.</em></td>
</tr>
</tbody>
</table>

*Table 1: Teacher’s example of analysing persuasive appeal for classroom practice*

Appealing to logos, the author uses inductive reasoning relying on evidence and observation. This is also supported by a claim citing the *President’s council on bioethics*, thus appealing to ethos by using a credible source. In contrast, the appeal to pathos is based on a provocative, more subjective issue on the social role of athletes. Also, the tone of this claim is more
emotive; it is language which has an emotional impact on readers, rather than using reason or status, to persuade. For the Sport and Competition course, the task required learners to compare two academic papers, specifically, two experts’ opinions on the issue of legalising performance enhancing substances in sport. Most students found that appealing to *pathos* was common in the pro-legalisation and *logos* more common in the antithesis. They also found that appeals to *logos* were more convincing than *pathos-centric* argumentation, and this aided their critical review of the authors’ premises in their articles.

**Discussion**

For this section, the advantages of these activities for the CLIL classroom are discussed.

*Assessing students’ prior knowledge*

By asking students to input a section of a text and to create content-specific concordances, mind maps and concept maps, a tutor can find out how much students in a class know about the content-specific field. As Novak & Cañas (2004, p. 5) state:

> Learners and teachers almost always have faulty knowledge or misconceptions in virtually every domain of knowledge that has been studied. Research has also shown that these misconceptions are notoriously difficult to overcome with traditional instruction. The use of concept maps has been shown to be effective for remediating misconceptions.

Doing these activities proved to be beneficial for this reason, particularly for a new subject that many students had little prior knowledge of. Students commonly needed clarification as to the meaning of lexemes, and how to pronounce certain terms. One caveat for concordancing is to be mindful of the density of the text being analysed. If a text is densely content-specific, only sections of it should be given to groups to present.

*Eliciting in-class discussion and collaborative learning*

When students are engaged in groups in mind-mapping activities, it is interesting to note how their lexico-grammatical structures grow and expand. Often at least two drafts are created before a final, cleaner version is offered for sharing. Then, as learners present, groups find examples that they had not perceived and add these to their own forms. The example in figure
2 is only an excerpt of quite a complex construction from the paper by Loy and Coakley (2009).

With regard to concept mapping, discussions about hierarchies can arise from the sharing. For example, rationalised provoked debate as another group considered that bureaucratised would be more appropriate as a more encompassing concept. However, after some whole-class discussion, it was decided that rationalised was preferable as, within the context of the Sociology of Sport, rationalised refers to sport moving away from spontaneous play, which is a primary reason for a change in its structure whereas bureaucratised refers to measures taken after rationalisation such as timing procedures, game rules and authoritative figures such as FIFA becoming essential. This was an example of a conceptually-challenging small-scale CLIL discussion elicited through concept mapping.

**Reading critically and preparing for writing**

The techniques of argument mapping and analysing persuasive appeal in academic texts were observed to work well together as an integrated set of academic literacy skills for the expository genre. These skills helped to improve the clarity of the students’ thinking and to improve their reading comprehension and written argumentation. It was found that some learners needed guidance as to how to deconstruct texts critically using these strategies. The following is an example of a good summary of a relatively complex argument from an academic text (Wiesing, 2011) that a group of students compiled in class:

<table>
<thead>
<tr>
<th>Pathos &amp; ethos</th>
<th>No biological agent powerful enough to induce major bodily alterations can be entirely trustworthy or without side effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethos</td>
<td>Performance enhancing drugs induce major physiological change</td>
</tr>
<tr>
<td>Logos</td>
<td>They should not be legalised</td>
</tr>
</tbody>
</table>

*Table 2: Students’ example of analysing persuasive appeal for classroom practice*

Similarly to the academic paper, the summary structure applies the principles of Aristotelian syllogism, moving from a major premise to a related specific statement, then to a conclusion. Also, reflecting the paper, the argumentation appeals to ethos, logos and pathos: ethos is conveyed by scientific lexis e.g. biological agent and induces major physiological change; an appeal to pathos is made through creating an expectation of dread with collocations such as
not entirely trustworthy. Finally, the conclusion ‘they should not be legalised’ is the logical consequence of the previous premises. However, in the full-length academic paper, the argumentation does not appear as succinctly as it is presented above. As is typical in an expository, academic paper, some premises are unstated assumptions, some are supported with primary and secondary sources, and conclusions are sometimes only inferred by an author. The technique of argument mapping allows learners to pinpoint the main contention in a text, dismiss unrequired discursive elements and make distinctions between premises and conclusions. As Rider & Thomason (2008) argue, this cognitive process is commonly ignored at any educational level, despite it being crucial for academic literacy. In most programmes, reading for general meaning or gist is the most common objective and little regard is given to such activities. In addition, it was found from their initial writing tasks that some learners required practice in maintaining logically complex argumentation. A focus on argument mapping at the organizational, pre-draft writing stage is an excellent strategy for some learners when planning what is going to be written about and how it will be presented. It also helps students to engage in peer review: if a peer’s work lacks clarity of thinking, creating an argument map might be problematic.

**Catering for mixed abilities**
The above-mentioned activities tend to cater for mixed abilities effectively as they are conducted in groups. Learners work with computer and collaboratively design their maps or tables. They then prepare and often take turns to present their work. Finally, as students have worked collectively to construct their visual, they have a strong sense of ownership towards it and this tends to lead to a sharing of the floor during the question time that follows the presentation.

**Conclusion**
Each task presented encourages active, collaborative learning, and each is data-driven, ensuring that the teacher has a role as a coordinator of research and facilitator of awareness-raising. In addition, as noted already, these activities require learners to use the target content-specific language and it is presumed that during the text deconstruction stages, they are noticing patterns of general cross-curricular academic language in context. Further, if they are required to present their completed tasks, there is a need for students to use the target
language in context. Thus, it is hoped that both intentional and incidental learning simultaneously occurs.

All of the activities discussed in this paper can easily be done in class in groups; if necessary, a text can be split up into segments so that learners do not deconstruct the same parts to increase engagement and meaningful collaborative learning. At the lexico-grammatical level, through concordancing, mind mapping and concept mapping content-specific texts, learners are guided to notice (facilitating the processes of intention and attention) and are then encouraged to manipulate these resources by negotiating meanings, and to develop inherent connections between lexemes. At the discourse level, activities such as argument mapping and analysing persuasive appeal enable learners to critically read content-specific texts and to make informed judgments about the meanings authors strive to convey through the premises and conclusions drawn in their writing. Strategies to critically deconstruct expository texts in this way develop important critical thinking skills such as analysing, associating, evaluating and conceptualising. They are also useful in reconstructions. For instance when asked to summarise a text, they act as an effective foundation from which to build. In addition, the academic literacy skills, as demonstrated in the literature reviews for each, are common in diverse academic fields and are thus transferable and useful in the long term.

For the Sport and Competition course, students were required to write 1500-word persuasive academic essays. Learners chose their own topics, and many focused on their own areas of study or their own passions. For example, an engineer wrote a paper on the use of technology in sport and to what extent we should allow it; he used the case study of the LZR swimsuit during the Beijing Olympics as an empirical source. A female student wrote about women’s football and the way a female’s body is portrayed in the sporting media; this student drew on feminist and postmodern feminism for her expose. In the writing of these papers, the students drew on some of the lexico-grammatical resources encountered during the course, but they were exposed to a great deal of new content-specific language through their own research and this provided them with the bricks required for their essays. In the end-of-course feedback, students reported that they had used the skills presented in this paper for their own research, particularly during the reading of complex content-specific text and the writing of their literature reviews. That is one major reason why the activities presented were selected for this
paper. A common thread in the course feedback is encapsulated in the following student’s writing:

*I have learnt a lot, both in content and especially with regards to academic reading and writing skills, and I believe that these will be very useful and applicable for the rest of my time at NUS.*

The main benefit of the strategies for CLIL presented in this paper can be seen to be their transferability; whatever the student’s specialisation, raising awareness and facilitating practice of academic literacy skills such as these, are essential. It is hoped therefore that readers of this paper will see how some of these practices in a Content and Language Integrated Learning classroom can be effective in developing academic literacy at lexico-grammatical and discourse levels as well as learners’ lexicons.

**References**


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**About the author**

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