

Abstracts and the Development of Academic Literacy: A Genre Perspective

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Abstracts are an important micro-genre of academic prose. While their purpose is to outline and make immediately accessible academic texts, they serve a variety of functions for professional writers and researchers. One element that is perhaps overlooked is their usefulness in the development of academic literacy for L2 undergraduate and postgraduate students who read and write in English. Abstracts represent a rich and highly condensed experience of academic discourse linguistically, rhetorically, and culturally. This paper will overview the following: the structure of abstracts, how they might be useful for EAP literacy development, what L2 students find challenging and offer some pedagogical approaches to developing learner confidence on issues like lexical development and upgrading their reading ability.

Key Words : Academic Literacy, EAP, Abstracts, Genre Analysis, Reading

Introduction

For learners preparing for postgraduate study abroad, the reading of academic materials often serves as the basis for lesson preparation, broadening topic knowledge, and is integrated into all forms of assessment, both written and oral (Garbe, 1991; Jordan, 1997). Familiarity and comfort with academic journals and books is crucial for student success but one text-type that is especially useful in the development of tertiary-level literacy is the academic abstract. The benefits of using abstracts as authentic EAP material is that this genre provides a ‘vertical slice’ of language and content, is a contained form of prose and can operate as a piece of independent discourse reflecting a range of different communication skills e.g. summarising, structuring and simplifying information (Morton, 1999). However, students a) often misunderstand their purpose, confusing them with introduction sections because of the similarity in rhetorical rules and language features, b) struggle with the information density caused by highly nominalised sentences and c) struggle to deal with the high frequency of academic

jargon. By extension, students also fail to recognize the learning potential of these texts.

This article has been written for teachers based in university or other tertiary level contexts who work on EAP courses, in order to highlight the potential in using short-form texts to increase the literacy of L2 students and to drive more learner autonomy. This paper will discuss the following: the structural and discursal nature of abstracts as a genre, challenges faced by learners when confronted with authentic texts, basic strategies for academic reading and, some common strategies for developing academic literacy in the EAP classroom. This paper will focus on language used to prepare learners for postgraduate contexts on English speaking programs. The examples used here will reflect that context.

The Abstract as Genre: Purpose, Structure and Context

Broadly speaking, the main function of an abstract

is to concisely describe or summarize the content of a research article/presentation/project, and is used in the selection process of academic publication or conference presentation (Swales, 1990). They are used for evaluation and the promotion of academic content. More practically, they are additionally useful for research students and professional academics as this condensed text helps them to determine if such secondary source material is suitable to integrate into their own presentation or written work.

Abstracts are often characterized as being distilled in genre (Swales, 1990; Swales and Feak, 2012), with a specific range of communicative functions, which over time have formed certain rhetorical patterns (Donesch-Jezo, 2012). They can be characterized into two structural styles: a) indicative (summarizing performed research) or b) informative (expressing results and interesting points). The use of either is usually determined by academic field. The structure of abstracts can be debated, but Hyland (2004) and Swales and Feak (2009) state they usually constitute five main parts (or 'moves'): 1) background, 2) study purpose, 3) method, 4) results, and 5) study conclusion(s). However, content and rhetorical structure are determined by academic field and situational context (Lores, 2004). STEM related study tends to favour the informative construct whereas humanities research produces more evocative forms of indicative abstract. The goal for many EAP educators is to train competent readers who can differentiate the various moves to quickly assess relevant secondary sources.

As with most academic writing, the text features are nominalised style, passive voice, reporting verbs, formulaic phrasing (for cohesive and linking purposes) and academic lexis (Stock and Eik-Nes, 2015; Molino, 2010). Though lexically dense, verbal tense is often limited to present simple and present perfect forms (Wallwork, 2011) with exception to results writing which uses the past tense. Personal pronouns also feature to make the text more direct and shorter, especially for conference presentations.

Authentic Texts and Learner Difficulties

There are a range of different hurdles that L2 readers face when reading abstracts. One problem encountered by students in EAP contexts is the struggle with register and its effect on readability. Negotiating the field, tenor and mode of vocabulary and text can be notoriously problematic (Thornbury, 2005) as there is no one-size fits-all method in the EAP classroom, and so, academic context is crucial (Morton, 1999). Specifically, students in East-Asia struggle with the use of authentic texts, not because of the linguistic difficulty but because of the contextual or conceptual use (Swales, 1990). This has significant consequences for students studying abroad as such limitations to understanding can affect their ability to perform well on their courses.

Text density, seen in complex sentence structures, syntax, lexis and heavy nominalization, can create many problems for learners dealing with academic English texts. Though this can often fluctuate in academic prose (Lewis, 1993), rich noun phrases are common (Richards and Schmidt, 2010) and often obscure the subject of the sentence (Swales, 1990), making the main verb difficult to read e.g. ***This rise in body temperature inhibits the growth of the invading pathogen.*** Learners often struggle to make sense of texts because their own language does not require such extreme morphology and impersonal style is attained through simpler strategies such as single-character addition (for example, in Chinese). Density disrupts reader fluency and inference is difficult because of the quantity of words assigned to a single subject. In addition, this subject does not provide readers with enough clues for meaningful decoding (Nuttall, 2000).

One practical, and perhaps cultural, challenge that many teachers face is that of reader aids. Students consistently use electronic and mobile application dictionaries to support lexical gaps in knowledge which fail to account for idiomatic, collocated, and contextual uses in EAP. This is also especially disruptive to their reading fluency and skills, and with the rise of app-based dictionaries the issue of legitimacy may now be prominent issue. Learners overly depend on them to temporarily fill knowledge gaps, without developing retention or reading ability.

Nuttall (2002) suggests that an increase in reading can mitigate such reliance because it is a highly contextual activity, language can be absorbed gradually through recurrent exposures, providing plenty of opportunity to infer from contexts.

From a top-down point of view, prediction can often be enormously difficult. Prediction and utilising a student's familiarity of the topic has been an essential reading skill in the EFL classroom. However, often student's knowledge is incorrectly applied or non-existent, meaning that inference strategies are not appropriate or the activity is misutilized. Reading during these circumstances means that students often miss main points, or that effective comprehension breaks down completely. This can have serious consequences for their performance in environments or situations where time is a factor. Abstracts, as a highly structured textual genre, can serve as a perfect resource for prediction activities.

Reading Strategies for Abstracts and Other Academic Prose

While there are a range of different reading strategies involved in EAP, texts are usually a vehicle for reading comprehensively (Jordan, 1997). This requires the reader to possess a knowledge of the 'topic-types', textual characteristics and structural elements. This can cause considerable strain on the learner due to the mental processing required and a combination of reading approaches. It additionally takes learners time to build a substantial nexus of knowledge to read and communicate in meaningful ways. The first approach towards success would be a top-down reading method.

In the case of the abstract this approach is a goal-led form of reading where the reader's motivations and expectations about the textual contents involves sampling the text to assess its relevance (Grabe and Stoller, 2002). By generating schemata, meaning is drawn from interaction with the text (Baker and Boonkit, 2014). Competent readers are conscious of patterns and purposes of such materials, being able to infer and predict; meaning, these readers are able to use their intelligence and experience (Nuttall, 2000). Here, it is important to see reading as a

cognitive process which can aid the development of processing capacity (Lightbrown and Spada, 2013). However, this approach requires a great deal of discourse competence to be effective as there is a strong relationship between knowledge and successful reading proficiency (Uso-Juan, 2006).

In terms of academic reading, the use of top-down reading methods are fundamental for dealing with dense, complicated language, inferring meaning of jargon from context and using schema to activate experience and familiarity to support reading. Readers are able to anticipate or 'predict' content via topic and 'discourse organisation' prior to reading. (Grabe and Stoller, 2002). By extension, the use of discourse phrasing can aid navigation of texts when skimming and scanning.

The second approach would be a bottom-up method. This approach to reading relates to the 'mental translation' of a text in an atomised way, suggesting that a text is read 'piece by piece' (Grabe and Stoller, 2002). Capable readers successfully can perform various levels of linguistic decoding of texts to build meaning. This requires a closer look at language elements to confirm understanding, negotiating unknown lexis and their register (Thornbury, 2005). For example, skimming, checking word meaning and reading aloud are all important ways of comprehending (Nuttall, 2000).

Bottom-up approaches can help readers discern language which marks aspects of discourse e.g. *The study found that* or *as a consequence*. Reader decoding, which allows for more processing time than listening, can be found in formulaic phrasing, high-frequency academic lexis, sentence structures and familiarity with affixation methods, allowing for more incisive metacognitive processing e.g. *It was suggested that, campus-based, , bi-, de-, dis-, hyper*. Importantly, discourse and use of lexical features can be important e.g. *channel, reference* and *paradigm*, or when negotiating between British and American English spelling. A combination of both top-down and bottom-up processing, also known as the *inter-active reading*, is seen as an effective way competent readers decode texts.

The Importance of Genre and Discourse in Academic Literacies

On top of the fairly typical strategies offered above it is also important to include genre analytical approaches in EAP pedagogical contexts. Competent readers can identify structural ‘moves’, text features and relate this to their own needs (Bruce, 2008; Hyland, 2009). Discourse competency and language register requires a great deal of linguistic and non-linguistic knowledge building for the learner to help increase their awareness (Bruce, 2008) which is further supported by pattern recognition research for reading (Willis, 2008). Because of the strong link between reading and writing in EAP, proficient readers can transform texts as a source of authentic material into language production. One study found that successful EAP writers use cognitive, compensation and metacognitive methods when reading (Baker and Boonkit, 2014), thus highlighting the route from genre awareness. Nuttall (2000) emphasises that effective exploitation of texts to support transformative forms of writing also strengthens the importance of awareness raising and genre analysis activities (Donesch-Jezo, 2012). When learners reach this level of literacy, they can usually handle the occasional unpredictable nature of genre form.

Pedagogical Approaches for Literacy Development in EAP

In this section, a number of basic strategies will be suggested to support teachers (and learners) with literacy development using academic abstracts:

a) Guessing Meaning from Context

To assist students in recognizing technical jargon in academic text, it is important to regularly have students guess meaning from context through eliciting techniques or fixed classroom activities. Using an authentic abstract, students could be presented with a subject which they can discuss to activate schemata and background knowledge. The teacher would elicit and introduce the text topic. Before reading, students would be given a list of possible vocabulary or collocations with examples of use that will feature in the text e.g. *longitudinal study*. Students would

then be asked to skim for these words and read them in their new context e.g. *In this longitudinal study the experiences of a group of students were considered over one year*. In pairs, they would compare the words with the examples in the list for similar use/meaning. The teacher could ask the students what they found, how they came to that decision and what language/discourse-clues helped them decide.

This procedure relies on teachers deciding on the target language and on the learner being of a high enough level to decode contextual subtleties. Therefore, it would be sensible to focus on language that is common to most academic fields, e.g. academic word list/British Academic Written English Corpus etc. The activity is useful for focusing attention on specific vocabulary and assumed lexical problems. This can help advanced learners discover the language/phrasing for themselves by asking them to contribute to a vocabulary database or diary. In EAP contexts, this needs to be combined with long-term process or dialogical learning approaches to be effective (Windsor and Park, 2014).

b) Noticing (Sentence Comparison)

For reading and understanding abstracts, students need to recognise and decode dense, nominalised texts. Bottom-up reading can be especially successful when combined with a ‘noticing’ activity design. First, in order to draw attention to important information found in the cluster of words, students would be asked to read the following modified sentence and identify the head noun from the other elements:

The reproduction of organisms is a major characteristic of life.

Students would compare with each other, then look at the following simplified version:

Organisms reproduce. This is a major characteristic of life.

Students would be better able to confirm the subject in this case. They would then be encouraged to search through the remaining examples or text to identify further head nouns themselves. Noticing activities are enormously powerful for creating

contrast and directing students attention towards important details. This can be more effective than the Nation method which is extremely complicated and unwieldy (Nuttall 2000). In the EAP classroom, it can be more productive to teach students how to nominalise their writing before wading into more complex reading matter, allowing students to recognise dense texts by easing cognitive load.

c) Gap-Fill and Inference Games

Helping students infer meaning from context to develop their reading fluency skills is especially important for students in higher education as reading can be the keystone to success all preparation and participation. Students should be given an abstract where a selection of words are missing or replaced with nonsense words, and dictionaries are banned. In groups, the students are asked to guess/infer what word(s) could be used in these places. The teacher would then give students a range of words which could be used to fill/change the spaces in the text. While the students decide, they will begin to understand that the options are actually quite limited. Students would then be given the correct answer, addressing any alternatives or emergent language. Once finished, the teacher could change the overall context of the reading by asking the students how the lexical choices would change e.g. *if they article about the advantages of globalization changed to the disadvantages of globalization*. Students would be asked to generate words based on the new context. Inversely, a checklist could be used to draw attention to the lexis e.g. *does the word have any prefixes/suffixes etc?* The benefit here is that learners activate their own worldly knowledge while narrowing the topic possibilities and allow learners to carefully assess missing or unknown words. The combination of being given words and generating synonyms would give student more confidence when inferring language. However, this method does not change individual habits or learner behaviour - the practicality of this approach is often over-stated by language teachers.

d) SQ3R Reading Technique

In order to help students develop predictive, top-down reading techniques, the SQ3R technique can be used to support reading of short academic articles

(Nuttall, 2000). SQ3R refers to 5 steps the learner must take when reading: survey, question, read, recite and review. Abstracts or other short academic texts are especially useful because they are short and contain academic features (e.g. impersonal style, jargon, complex sentences, topic sentences etc). In the case of EAP learner texts, they are suitably levelled. Firstly, learners would survey the text for the main point and then generate questions they would like to ask concerning the perceived topic. They then read again to answer those specific questions in order to build up their knowledge, noting any relevant information and sharing their findings verbally or in writing. The information can then be discussed for importance or relevance. To consolidate the content, the teacher could ask students to provide a short summary of the text based on their review. This can be done without teacher guidance once students are familiar enough with it.

This will allow learners to gain a clear purpose by personalizing the topic as stipulated by Grellet (1981) and Nuttall (2000). This method ensures the integration of other more communicative skills and deals with gaps in knowledge. Although success using this technique has allowed learners to recognise patterns in texts and acquire effective habits, it does not directly address learner topic knowledge and prediction skills, that comes with wider and more persistent reading. This technique still reinforces the idea that careful selection of texts and lead-in activities are necessary considerations.

Conclusion

Overall, the preceding sections have attempted to demonstrate what is required when using abstracts to develop the literacy of EAP students and how they might be used as teaching materials. While the abstract can be perceived as a structurally simple entity, the language at the sentence and lexical level can be enormously deceptive in difficulty. With that in mind, there are a number of discourse and genre features that can be exploited through the use of these authentic texts. A technical knowledge of these components will allow EAP practitioners to raise students' knowledge of academic voicing, technical terminology, complex sentence structuring and cohe-

sive lexical bundles – all of which feature heavily in longer academic prose and can be deployed (by the student) in broader written contexts. Pedagogically, this means that learners are better placed to exploit these texts for future use to develop their literacy and knowledge of their chosen research field, and incidentally, replicate these discursual features as academic writers. Using abstracts, especially in pre-sessional courses, gives learners greater confidence when making the leap into IMRD structured research article and book form research.

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