

Scaffolding ESL Undergraduates' Academic Acculturation through Journal Articles as Teaching Resource

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Abstract: In academic publishing, the fundamental purpose of the journal is to communicate recent advances in knowledge or reviews of existing research, thereby promoting scholarly dialogue and debate. As such, journals are aimed primarily at established scholars within their disciplines, and consequently may be rarely consulted by those outside the target scholarly community. The content and language of the work presented may therefore present an intimidating barrier to those seeking entry to the community, such as first-year undergraduates who are by definition undergoing a process of academic acculturation. In many countries these students fall into two broad groups: those for whom the language of instruction is their first, or equivalent, language, and those who are studying in a language other than this. While undergraduates in the first group may need to make significant efforts to engage with the academic writing presented in journals, for those in the second group the barrier extends beyond anticipated difficulty in comprehending the conceptual aspects of the writing to include difficulty appreciating its cultural, social and linguistic dimensions, which can be less accessible to those studying in a second language. Drawing on the outcomes of recent research concerned with the induction into the academic community of undergraduates for whom English is a Second Language (ESL), this paper explores the possibilities created by the use of academic articles as resources in teaching ESL students in higher education contexts in particular. It is suggested that requiring first-year ESL students to read appropriate and relevant journal articles as part of the syllabus offers significant benefits. These are explored under the overarching opportunity to scaffold students' academic acculturation at a formative stage through exposure to current, authentic and substantive examples of academic discourse within their target disciplines.

Keywords: ESL; EAP; reading skills; journal; acculturation

Introduction: English-medium higher education

Worldwide, over 2.7 million students pursue higher education outside of their country of citizenship annually. These internationally-mobile students make a significant impact on individual countries; for example, in 2006 they accounted for 25.5% of all students enrolled in higher education institutions in Australia (Baik & Greig, 2009, p. 401) and 13% in the UK (UK Higher Education International Unit, 2009).

Concurrently, many countries have recently witnessed rapid expansion and improvement to domestic higher education opportunities. In India, for example, the number of post-secondary

institutions tripled from 6,000 in 1990 to 18,000 in 2006, while its college age population is anticipated to grow from 125 to 139 million between 2005 and 2015. Such growth is expected to contribute to the numbers of students opting to study overseas (Roslyn Kunin & Associates, 2009, p.8; British Council, 2004). Concurrently however traditional international student destinations such as the US and the UK are to some extent being replaced by: "... a bewildering assortment of joint ventures and overseas branch campuses [...] as American, Australian and British universities now compete for international students in their home countries [...], helping to provide an international intellectual environment" (Graddol, 2007, p.79).

While universities located in the US, the UK and Australia would be expected to provide English-medium instruction, it is increasingly the case that domestic higher education institutes located in countries where English is a second language are opting to provide instruction in English, reflecting their desire to retain students who might otherwise be attracted by the enhanced employment mobility and opportunity provided by an English-medium education. Graddol (2007, p.74) notes that approximately 66% of the top 100 universities worldwide are in English-speaking countries and that this is one reason why increasing numbers of universities internationally are opting to provide instruction in English. He continues:

If an institution wishes to become a centre of international excellence, it needs both to attract teachers and researchers from around the world, and to encourage international students to enroll on its courses, enriching the university's prestige, revenue, and intellectual climate. A recent commentary in *The Economist* observed: The top universities are citizens of an international academic marketplace with one global academic currency, one global labour force and, increasingly, one global language, English.
Graddol, 2007, p.74

Graduates of these English-medium universities were once expected to have attained English language proficiency of around IELTS 6; however, exit proficiency requirements are slowly being replaced by entry proficiency requirements of IELTS 5.5 or equivalent, with the expectation that students will reach IELTS 6.5 prior to graduation. Undergraduates' proficiency in English Language therefore ranges from IELTS 5 to those with bilingual or first language competence (Graddol, 2007, p.96).

It is apparent therefore that a significant proportion of undergraduate education worldwide is provided in English to students for whom English is a Second Language. When they progress from secondary to higher education, these students make the transition from *learning English* at school to *learning in English* at university. Various implications are associated with this transition.

Supporting ESL students in higher education

Students who studied English as a second language at school as a subject find that at university they are required not only to learn English, but also to learn *in* English and to become familiar with the culture and standards of scholarship. ESL students' work is therefore compounded, and it is particularly demanding for those at the lower end of the proficiency scale. Universities however provide support for these students by requiring them to undertake preparation courses as pre- or co-requisites to discipline-related courses, often labeled 'English for Specific Purposes' (ESP) or 'English for Academic Purposes' (EAP). Such courses provided the focus of a study carried out from 2003 – 2007.

Investigating the preparation of ESL students for undergraduate study

The research set out to investigate the induction of ESL students into the academic community in several internationally-located universities by addressing the question: 'How does EAP tutors' practice compare with discipline lecturers' expectations of their ESL students?' Other studies have compared the outcomes of EAP preparation with subject lecturers' expectations. Kehe and Kehe (1996), for example, investigated ESL students in Japan who were preparing for study in the US, while Ferris and Tagg (1996), studied lecturers' expectations of their ESL students' oral and aural skills. The focus of both studies, however, was on ESL students who intended to study in the U.S. This research, on the other hand, was concerned with ESL students who would be continuing their studies at the same institution. Aspects of its findings are compared here to current practice at one institution; see Brandt, 2009a, pp.1 – 18 and Brandt 2009b, pp.145 – 156 for a fuller report of the findings.

16 subject lecturers and 20 EAP lecturers, located in nine countries including Indonesia, Australia, Bahrain, the UAE and the UK, took part in the research, and all data were collected within an ethical framework of seven criteria (Patton, 1990) including guaranteeing participant anonymity and confidentiality. Data were gathered via a survey and interviews, and analyzed and synthesized manually in order to provide maximum opportunity for familiarization, understanding and comparison (Lincoln & Guba, 1985) via a process that involved collation, annotation, and application of the 'search' function of MS Word to enable the identification of 31 issues, organized into 9 themes, considered critical to the preparation of ESL students for English-medium university study (Denzin & Lincoln, 2000; Miles & Huberman, 1994; Strauss & Corbin, 1990).

Investigation outcomes

This paper responds to two issues within the theme of the development of ESL students' academic literacy skills. Firstly was the view that reading and writing skills should be integrated,

in contrast to the current practice at some universities reported by participants. Secondly, the choice of reading matter to facilitate this development was frequently experienced as problematic.

First year students may be organized into preparation classes according to their discipline (referred to here as ‘discipline homogeneous’ classes). Alternatively, students’ disciplines may be ignored, and another organizing principle applied, such as proficiency level or a focus on the development of a particular skill or skills. Such classes are composed of students of different disciplines and are referred to here as ‘discipline heterogeneous’. Both class compositions pose problems for ESL tutors seeking reading matter for students. In the case of the discipline homogeneous class, students at this stage have little discipline knowledge, and as students have yet to specialize, participants reported finding that not all aspects of one discipline are of interest to all students. In the case of discipline heterogeneous classes the selection of reading matter is further complicated by the variety of disciplines and interests present in one class. Such features constrain the selection of reading matter for both composition types. This problem is a familiar one; Hirvela (2001, p.331), for example, cites research published between 1987 and 1997 and notes that “a major point of contention in EAP is what kind of texts should be used in EAP instruction.”

A number of approaches to sourcing suitable texts were identified in the research, and these are presented and analyzed in Table 1 below in terms of three key criteria: their usefulness to both class compositions, the extent to which they exemplify academic writing and their currency.

Text source	Useful with discipline-homogeneous class	Useful with discipline-heterogeneous class	Exemplification of academic writing	Currency
Literature	No	No	No	Possible
Media	Possible	Possible	No	Yes
General interest semi-academic	Possible	Possible	Possible	Possible
ESP/EAP textbooks	Yes	Possible	Yes	Possible
Discipline-specific textbooks	Yes	No	Yes	No
Sections of academic writing e.g. abstracts	Yes	Yes	Yes	Yes

Table 1: Analysis of sources of reading matter for ESL students

As apparent from Table 1, ESP/EAP textbooks are useful to both class compositions, but can become dated. Respondents also reported questionable relevance and lack of student interest

when using EAP textbooks with discipline heterogeneous classes, as these texts often make use of general interest academic or semi-academic writing (one example provided was a description of glass bottle manufacture, described as of limited interest to the respondent's students). Literature, on the other hand, has least value as a source of reading matter, while sections of academic writing, such as abstracts (see Morton, 1999), meet the three criteria of relevance, exemplification and currency, particularly in the case of discipline homogenous classes, who can benefit from group and class work involving articles closely related to their intended discipline. In the case of discipline heterogeneous classes, however, the use of academic writing is still possible if topics are selected that have wider relevance. This issue is discussed in greater detail below.

While the research led to the identification of current sources of reading material for ESP/EAP tutors, it also established that students are rarely asked to read full-length journal articles. It is assumed that as journal articles are not written for an audience of students, they are likely to be linguistically and conceptually too complex, particularly in the case of first-year ESL undergraduates. At one institute in the Arabian Gulf, however, students are routinely required to read complete conference proceedings papers and journal articles as part of courses in Communication, which aim to develop academic and professional communication skills in a context in which English is a Second Language for the majority. These articles form the basis of the literature review part of research projects, and the requirement not only helps to develop students' reading and writing skills, but can support induction into the scholarly community.

Academic reading skills

In academic contexts, the challenge of reading and writing in a second language is compounded, as writing at this level is often based upon sources which requires the integration of reading and writing skills and recognition of their interdependency. Hirvela (2001, p. 330) observes that:

The act of [writing] from sources starts with the reading of those texts. Difficulties in reading them impact significantly on writing about them, since students are writing in response to what they have read and how they have read it. Finding ways to incorporate reading effectively into EAP writing courses is essential, then, if we are to establish a meaningful link between reading and writing in EAP instruction.

Hirvela, 2001, p.330

Integrating into writing information contained in sources is a complex task, requiring several higher-order cognitive skills. These include the ability to relate new information to known, to theorize, analyse, synthesize, solve problems and select and apply a range of appropriate metacognitive skills and strategies. ESP/EAP courses aim to develop such skills in students, and the value of reading matter is enhanced when meaningful links between it and student writing are established, as Hirvela, (2001, p.330) suggests. What, however, is the basis for a 'meaningful link'?

Curriculum as ‘web of consistency’

In relation to the development of students’ higher order skills, Biggs (1999, p.64) emphasizes the need for an “aligned system of instruction” which is a “fully criterion-referenced system, where the objectives define what we should be teaching; how we should be teaching it; and how we could know how well students have learned it.” In such an outcomes-based approach, Biggs (1999, p.64) notes that there is a particular need for: “... all components in the system [to] address the same agenda and support each other. The students are ‘entrapped’ in this web of consistency, optimizing the likelihood that they will engage the appropriate learning activities. I call this network *constructive alignment*.” A “system [that addresses] the same agenda” clearly justifies the exclusion of non-academic reading material such a literature and media sources.

The notion of a constructively aligned system or curriculum prompts examination of the system itself, on the functions and products of a university. These are encapsulated in the concept of scholarship, which is: “bound up with the nature and functions of the university. It is highly valued in higher education. The ideal of the scholar is frequently intimately associated with ideas about the essence of what universities are for” (Brew, 1999, p.1). Definitions of the concept of ‘scholarship’ invariably emphasize teaching and learning, professionalism, enquiry and dissemination (Neumann, 1993; Brew, 1999; Healy, 2000; Shulman, 1993; Trigwell, Martin, Benjamin, & Prosser, 2000). Its products are reported through presentation and publication, with the latter in particular taking various forms, such as conference proceedings, journal articles, monographs, books and reports. Given that such publications reflect scholarship, requiring students to read different types of academic reporting as part of the syllabus could enable greater ‘constructive alignment’, (Biggs, 1999, p.64) as the products of scholarship reflexively provide the source of teaching materials. Such reading matter will inevitably address the same agenda and support other components of the curriculum, which can facilitate students’ acculturation into university culture via a: “learning process through which the individual acquires the knowledge and skills, the values and attitudes, and the habits and modes of thought of the society to which he [or she] belongs” (Bragg, 1976, p.3.). How ESL students at one institution are guided to read journal articles and conference proceedings related to their disciplines is considered next.

Bridging the gap: from topic of ‘academic development’ to discipline

Students at the Petroleum Institute in Abu Dhabi, United Arab Emirates, may register for one of five degree programs in engineering for the petrochemical industry: Mechanical, Chemical, Electrical, Petroleum and Petroleum Geosciences. The institute is English-medium and students on entry must have achieved a minimum TOEFL score of 500, equivalent to IELTS Band 5; in practice classes contain students of a range of proficiency levels, from TOEFL 500 to those who have bilingual mastery of English and, usually, Arabic.

All students take two Communication courses in their first year. A student-initiated enquiry-based course design is employed in which teams of students complete three research projects, having identified research questions that can be answered by gathering data primarily from within the institute. Students taking the first level course are encouraged to select research questions that are closely related to their stage of academic development and acculturation, such as the communication needs of first year ESL students, learning style, transition, library use or academic integrity. In researching such topics, they are guided to employ quantitative, qualitative and mixed methods, and are expected to locate and review relevant literature, design surveys, interview participants and analyze and present their data. The research cycle forms the content of the course; for example, students participate in workshops on the purpose of literature reviews; documenting sources; quantitative and qualitative research methods; writing research proposals and discussion and recommendation sections of reports.

During the two courses, students read approximately 12 journal articles or conference proceedings. While articles related to their academic development and acculturation are particularly useful early on, students need practice reading examples of academic reporting in their disciplines, because: “..... the academic language needs of our students are closely related to the purposes of the disciplines they are being inducted into. That is, different disciplines foreground different types of language – in terms of genre, grammar and lexis” (Cullip & Carol, 2002 (no page numbers provided)). An effective bridge, however, between articles related to individual academic development and those that relate to a student’s discipline is available through academic writing about scholarship in teaching and learning (SoTL) in the discipline. SoTL is concerned with the study of discipline-based teaching and learning, with “‘study’ being broadly defined to allow for disciplinary differences in epistemology and the need for interdisciplinary SoTL” (McKinney, K. (no date)).

A three-phased approach to reading matter topic is therefore recommended, illustrated as follows:

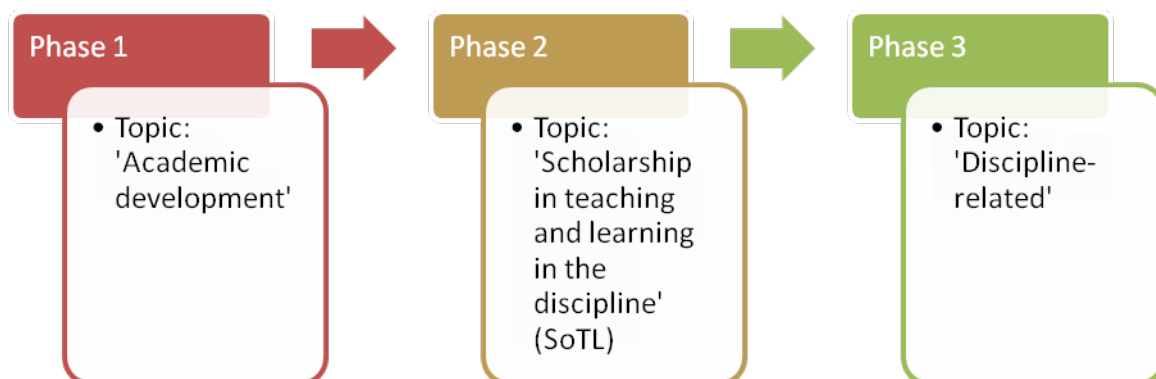


Figure 1: A three-phase approach to the selection of reading matter topics for ESL students

Such progression, constructively aligned to the extent that its components address the same agenda and support each other, can help to scaffold ESL students' linguistic development and their concurrent academic acculturation.

Benefits and caveats

Requiring ESL students to read conference proceedings and journal articles offers several benefits. Such articles are self-contained and readable in their entirety, providing opportunities for tutors to teach a range of reading strategies such as skimming and scanning, and using headings, abstracts, introductions and conclusions. New articles are also readily available, helping to provide successive cohorts of students with different materials and original ideas for research. Teams of students are also likely to select different articles, even when investigating related research questions, leading to originality of work and greater interest from other students in the same class.

Students however need guidance in relation to evaluating articles, which entails learning to reflect critically upon aspects such as authorship and the quality of the journal in which the article was published. Students can also be usefully introduced to the purpose and functions of the peer review process. In relation to difficulty, students should be guided to select readable articles, i.e. those where they are able to understand at least 90 to 95% of the words (Laufer, 1998; Nagy & Scott, 2000).

It is important to note that the three phase approach does not depend upon the type of project-based learning described above. It would be quite possible, for example, to ask students as a class to read an article related to an aspect of academic development or to their discipline, which is used not only to develop reading skills but also for the study of both language and content, and as a springboard to writing. Some of the opportunities that such academic writing provides are outlined below.

Opportunities

Conference proceedings and journal articles provide the ESP/EAP tutor with many opportunities. These include opportunities to teach / develop:

- *Language*: e.g. new vocabulary or structures; aspects of discourse; text organization (abstract, introduction, literature review, conclusion, etc); cohesion; coherence; reference; conjunction; genre, etc.
- *Academic standards*: e.g. citing; preparing reference lists; contrasting citations standards (e.g. APA, Harvard, IEEE).
- *Reading and critical thinking skills*: e.g. extracting content; identifying the author's intentions, assumptions, position, thesis, main claims, arguments and counter-arguments and supporting detail.

- *Information literacy skills:* e.g. using the library's database and internet search engines such as 'Google Scholar' to identify appropriate articles.
- *Learning strategies:* e.g. evaluating learning strategies; metacognitive and metacommunicative skills (e.g. identifying relevant content, monitoring comprehension and taking steps when comprehension is poor (Baker & Brown, 1980).

The use of conference proceedings and journal articles provides two further opportunities for the ESP/EAP tutor:

- *Research initiation:* articles, and searching for articles, can provide an excellent source of inspiration for students' own projects.
- *Student interest:* Students are more likely to select reading matter that is of personal interest or relevance to their studies.
- *Academic acculturation:* the process of deconstructing an article can provide students with a better understanding of processes of enquiry, which can help to improve understandings of the products of scholarship and their various functions.

The opportunities described above depend on carefully selected articles, a time-consuming task; students should however be provided with the skills to do this themselves. They need to learn that not all academic reporting is appropriate or useful, nor is it always prepared to a high standard. Such reporting should of course be avoided, and the acquisition and application of skills of evaluation is an important part of student learning at this stage.

Conclusion

This paper explores the possibilities for ESP/EAP classes created by the use of academic articles, which, with the advent of the internet, have become readily available. It is not suggested that students should read academic articles to the exclusion of other materials, but requiring them to read appropriate and relevant journal articles as part of the curriculum can offer significant benefits and opportunities in terms of their linguistic development and academic acculturation. In particular, integrating such reading matter into the curriculum can contribute towards a "constructively aligned curriculum", in which all components serve the same goals and support each other (Biggs, 1999).

To ensure that students receive adequate support in relation to this opportunity, however, a phased approach is suggested whereby students begin by reading articles closely related to their current stage of academic development, followed by articles concerned with scholarship in teaching and learning in students' disciplines, from which they may progress to those related directly to the discipline itself. This third phase is considered critical, as successful entry into the target discourse community is the ultimate aim of any course that seeks to prepare ESL students for academic study.

A curriculum that is constructively aligned as suggested here offers enhanced integrity and credibility, and is therefore likely to lead to greater student satisfaction. The materials and the support provided are also likely to encourage students to feel more involved in an academic culture that initially can seem intimidating. Most importantly, judiciously-selected articles exemplify scholarship, which, when reflected in good teaching and high tutor expectations, can elicit high quality student writing.

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