New Technologies in Higher Education – ICT Skills or Digital Literacy?

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Abstract

This study develops the argument that academic discourse may be seen as a feature of the discourse community within which it takes place. ‘Multiliteracies’, ‘Academic Literacies’, and ‘Digital Literacies’ with particular reference to EAP and Academic Discourse are considered. We argue for the inclusion of digital literacies within the EAP curriculum and specify the key components of the pedagogy of multiliteracies and attempt to locate them within the general field of EAP with relation to new technologies.

1. Introduction

A broad aim of this study is to make the case for the English for Academic Purposes (EAP) curriculum to incorporate the development of students’ skills in the use of technology or ‘digital literacies’. In making this argument it is necessary to refer to some relevant competency frameworks used within the field.

Much of the recent work on new literacies is strongly influenced by the New London Group (NLG)’s Pedagogy of Multiliteracies (Cazden et al., 1996) which has been described as “the central manifesto of the new literacies movement” (Leander et al., 2013). Works which influenced the development of the Pedagogy of Multiliteracies include Street (1984), Halliday (2004 [1985]) and Fairclough (1995). These works also feature significantly in Hyland (2009), all of which will be considered in the development of the case which follows.

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Within the field of EAP in the UK there are two key frameworks which are used to describe competencies, published by the British Association of Lecturers in Academic Purposes (BALEAP). The Competency Framework for Teachers of English for Academic Purposes (BALEAP, 2008) focusses on competencies required by EAP teacher. Their Can Do Framework (BALEAP, 2013) focusses on post graduate student competencies within higher education (HE) and is still under development.

2. Theoretical background

2.1. Language as a Social Construct

In considering aspects of the theory of literacy we will touch very briefly on the key texts which have been identified as influential on many of the later works. It is important to begin by illustrating a concept of language and literacy that they share. Hyatt (Hyatt, 2013:839) succinctly captures this when discussing the Critical Discourse Analysis (CDA) work of Fairclough (Fairclough, 1993): “language cannot be seen as being divorced from its social relations. Language constructs and is constructed by society … If language is invested with power relationships then an understanding of power is central to an understanding of language use”.

This view of language as a social construct echoes that of Street (Street, 1984) who gives a detailed critique of what he called the ‘autonomous’ theory of literacy, challenging the idea (e.g. Greenfield 1972 cited in Street 1984) that literacy consists of autonomous skills independent of the social context. This has important social consequences as the autonomous view could be used to legitimize unequal treatment of certain groups. Street rejects this and argues that “A statement about cognitive differences based on the assessment of the nature of literacy is as socially-embedded and open to challenge as are statements about cognitive differences based on race, ethnicity and class (Street, 1984, p. 29).

Halliday’s systemic-functional theory emphasises the social functions of language, concerned as it is with “the making and understanding of meaning” (Halliday, 2004:5). Three metafunctions of language exist at different levels within the grammatical system, making different kinds of meaning: ideational, interpersonal and textual. The ideational metafunction is divided into ‘experiential’ (construing experience) and ‘logical’ (constructing logical relations); the interpersonal metafunction relates to enacting personal relationships; the textual metafunction creates relevance to context (Halliday, 2004, p. 61).

It is important to note some considerable debate in this area. Widdowson (Widdowson, 2000) marked the 20th anniversary of the Journal of Applied Linguistics with an article critical of corpus linguistics and critical discourse analysis, taking issue with the work of Stubbs (Stubbs, 1994, 1996), Fairclough (Fairclough, 1995), and Halliday (Halliday, 2004 [1994]).

The argument between Widdowson and Stubbs appears to be one of linguistic methodology rather than one of political positioning presented through an academic argument of the right-wing vs left-wing sort objected to by Carr (Carr, 2000). Nonetheless it is important to recognise the socio-political positioning of works in the field. Pennycook (Pennycook, 1999) addresses the suggestion that critical work in TESOL is dominated by leftist politics with the unsupported pronouncement that: “The vast majority of work in TESOL remains locked within conservative or liberal frameworks, so a healthy dose of leftism is justifiable as a counterbalance”. More persuasive is his subsequent argument that “as TESOL professionals [we] need to move away from the modernist-emancipatory assuredness of traditional leftist approaches to critical work and instead engage with a more problematizing stance” (Pennycook, 1999, p. 334). He cites Foucault’s suggestion that the challenge is “to imagine and to bring into being new schemas of politicisation (Foucault, 1980, p. 190 cited in Pennycook, 1999, p. 334).

In this respect it is essential to start with consideration that the theoretical underpinnings to the study of literacy are ideological in themselves, identifying language as socially constructed and embedded in socio-political context. We find those theories persuasive and will accept them, turning to an examination of conceptions of literacy under the broad heading of Pedagogy.
2.2. Academic Literacy

Our main aim is to argue for the inclusion of digital literacies within the EAP curriculum. As a background we will briefly sketch the developments in the field.

The subtitle of the New London Group’s Pedagogy of Multiliteracies, “Designing Social Futures” illustrates the social context of their work. They describe Literacy Pedagogy as central to the “building learning conditions leading to full and equitable social participation.” (New London Group, 2000). This echoes the socio-political context described above.

The Pedagogy of Multiliteracies identified six meaning–making elements: Linguistic, Visual, Audio, Gestural, Spacial and Multimodal (Cazden et al., 1996, p. 65). As Higher Education has embraced new technologies over recent years, multimodal forms of meaning-making have started to receive recognition. A striking, and somewhat extreme example is seen in the recent publication of a PhD thesis in comic book format by Nick Sousanis, (reported by Dunn, 2014).

Fairclough (Fairclough, 2000, p. 170) describes Orders of Discourse and refers to “the order of discourse of contemporary British higher education (universities)”. At first glance this suggests a uniformity of discourse across the sector. This might be seen as similar to Bourdieu’s statement that in the French academy, “Academics as a group employ a certain form of language which operates as a given. As a result, they endow a certain set of linguistic requirements with all the objectivity of an institutional fact.” (Bourdieu, et al., 1994, p. 6 [1965]). However, Bourdieu’s comments related to the French university system several years prior to the student protests of 1968 and the didactic system described seems very distant from the modern UK university. Four of the five tests of ‘Academic Language’ Bourdieu gave to his students focus on vocabulary; the fifth is a multiple choice quiz on literary, musical and classical terms and characters. We suggest this has little in common with the discourse Fairclough described.

The Pedagogy of Multiliteracies has been critiqued recently with Leander and Bolt (Leander & Bolt, 2013:43) dissatisfied with the “heavy emphasis … placed on the texts that emerge as a result of the pedagogic intervention and design” and Jacobs (Jacobs, 2013) arguing that multiliteracies have been reified and are due for ‘reimagining’.

Hyland (Hyland, 2009) argues that discourse is absolutely central to academic endeavour. Knowledge creation and dissemination rely on the use of discourse which is accepted by the academy and students’ learning is measured and assessed within the same framework. Students are expected to conform to specific norms of academic communication and behaviour and these norms are often discipline specific. These discourses can be challenging for many students; Hyland identifies three groups: “students … returning to education later in life, who speak English as a second language, or who have not had a smooth uninterrupted path through the education system” (Hyland, 2009:6).

In broad terms the field of EAP may be seen as centred on preparing or helping students to meet the challenges Hyland identifies. It is in this context that the description of our in-sessional courses as ‘support’ may be somewhat controversial. It can be argued that the designation of EAP as support infers a fault or lack in the individual and that EAP classes are remedial, addressed at correcting a deficit. The ‘deficit model’ may, in turn, reinforce the established view of academic literacy as a set of skills which can be learnt (Hyland, 2009:9).

Lea and Street (Lea&Street, 2006) seek to avoid the deficit model with their Academic Literacies model. They propose three overlapping perspectives or models: Study Skills; Academic Socialisation; Academic Literacies. They argue that these are not mutually exclusive and could be “applied to any academic context”. The Study Skills model applies to surface, structural features of language. The socialisation model refers to “acculturation into … discourses and genres”. The Academic Literacies model “is concerned with meaning making, identity, power, and authority, and foregrounds the institutional nature of what counts as knowledge in any particular academic context” (Lea & Street, 2006:369). We would suggest that there are very few contexts where the multimodal comic book PhD theses would be considered acceptable.

It is worth noting that this broad view of EAP is not without its critics. Stephen Krashen, famous for his theories in the 1980’s, recently delivered a lecture at Temple University, Japan in which he claimed that teaching English for Academic Purposes is “a waste of effort” (Krashen, 2012). His main argument, echoing his earlier works (e.g. Krashen, 1981) being that substantial reading of texts which are easily accessible to the reader is key to language
acquisition. (A consideration of the differences and commonalities of ‘language acquisition’ and ‘literacy development’ is beyond the scope of this work but may merit revisiting).

2.3. Digital Literacies

Having sketched the pedagogical context of academic literacies we will now turn to the area of our particular focus: digital literacies. It is five years since Hyland (Hyland, 2009) noted: "While multimedia and electronic technologies are beginning to influence learning and how it is assessed, lectures, seminars and textbooks remain the key forms of knowledge transfer and writing in its various forms continues to be the way in which students both consolidate and demonstrate their understanding of their subjects." (Hyland, 2009:5).

In a world where technology is developing so quickly that software studied by first year undergraduate students is obsolete before they graduate, (Crystal, 2014) the rate of change within the field of digital literacy is also rapid. Oliver (Oliver, 2013) argues there is a significant deficiency in the academic field of learning technology: “the failure to explain technology theoretically” (Oliver, 2013:31). He analyses a case study from two distinct points of view, a positivistic account of the ‘affordances’ of technology and a social account which analyses “technology as text” (ibid: 35). The case study looked at an educational activity using a Second Life virtual world.

The affordance view sees technology as something external which exists outside of the learning experience but causes (or offers an opportunity for) learning to occur. The social view sees the technology within a social construct (for example, a computer is in fact a machine, in a classroom, owned and controlled by an organisation and connected to the internet via a service which is paid for, …).

Developing the idea of “technology as text” to illustrate the social approach, Oliver refers to Carr’s exploration of text through three lenses which we find are strikingly similar to the Hallidayan metafunctions described above (Carr, 2009, cited in Oliver, 2013):

- ‘structures’ – focussing on units of the whole – compares with the logical-ideational metafunction;
- ‘textuality’ – linking connotations socially – compares with the textual metafunction;
- ‘inter-textuality’ – includes relations to a reader’s stance – compares with inter-personal metafunction.

In addition to the comparability with Halliday’s meta-functions there are also striking similarities between Carr’s three lenses and the three models described by Lea and Street (2006): Study Skills (includes structural elements), Socialisation (includes interpersonal element) and Academic Literacies (includes meaning-making and epistemological considerations).

Davies’ (Davies, 2012) investigation of ‘Facework on Facebook’ includes consideration of the question of whether Facebook activities constitute new literacy acts or are simply new manifestations of acts which were already familiar. Firmly rooted in the New Literacy Studies (NLS) approach of the New London Group described above, Davies argues that “new technologies have facilitated new social literacy practices” (Davies, 2012, p. 21). She uses Lanksheare and Knobel (2006) to identify what constitutes a new literacy practice: ‘new “technical stuff” … [and] … new “ethos stuff”’ (cited in Davies, 2012, p. 21).

Although it has not been possible to access that work, there is a pleasing aptness in having found the same concepts online in Lankshear & Knobel (Lankshear & Knobel, 2007). For ‘new technical stuff’ they also use the term ‘digitality’ and point out this does not simply mean using ‘digital electronic technology’. They give a number of examples of new digitalities which “[enable] people to build and participate in literacy practices that involve different kinds of values, sensibilities, norms and procedures”. The ‘new ethos stuff’ means practices which are “participatory,”, “collaborative”, and “distributed” (Lankshear & Knobel, 2007, p. 7). The intent of the ethos becomes apparent when contrasted with conventional practices which are described as “published”, “individuated”, and “author-centric”. In this we see something of the criticality Oliver (Oliver, 2013) was keen to see developed.

Davies’ (Davies, 2012) ethnographic study of college students’ use of Facebook (and other media) might be seen as a social investigation of the “technology as text” that Oliver describes with particular focus on the textuality and inter-textuality. However, in Davies’ work there is also something of an acceptance of the machinery of the new technology as a given; this stance leans towards the ‘affordances’ view of technology. Having aspects of both of the
views is not contradictory as Oliver describes the views as on a continuum rather than mutually exclusive (Oliver, 2013). Davies concludes that the ‘Facework’ she observed does indeed constitute a new literacy practice.

In Language and the Internet David Crystal (Crystal, 2001, p. 232) was perhaps taking an ‘affordances’ view when he said that foreign language teachers were ahead of their field in recognising “the possibilities of the Internet as a medium for motivating their populations”. He was closer to Davies’ view of new literacy acts when he delivered a lecture by the same title to Sheffield University students this year (Crystal, 2014). Describing the communicative complexity of a multi-user chat room he concluded that the nature of that communication is unlike any that preceded it and therefore that a new literacy practice has evolved.

Whilst Davies talked of New Literacies in a technological milieu, Dudeney et al. (2013) address themselves specifically to Digital Literacies. Dudeney et al. (Dudeney et al., 2013, p. 2) give a definition of Digital Literacies as “the individual and social skills needed to effectively interpret, manage, share and create meaning in the growing range of digital communication channels.” They agree with the views outlined above which see literacy as social practice and argue that Web 2.0 technology, i.e. communication-based tools such as social network sites and blogs, have “[turned] ordinary web users from passive consumers … into active contributors” (ibid:3).

The first focus described is ‘Language’ and we are reminded that much of the digital world still requires users to read and write. Indeed, mobile users of Web 2.0 tools may well read (and write) considerably more words in a day than their unconnected peers.

Some of those words may appear in what Dudeney et al. (Dudeney et al., 2013) describe as netspeak, textspeak or txtspk referring to Crystal (2011, cited in Dudeney et al., 2013) as one source. Whilst there is no doubt that the new forms are still prevalent, Crystal (2014) argued that netspeak is now less fashionable.

Of the remaining language-focussed digital literacies, ‘code literacy’ is the most complex and seems to be considerably more challenging than the others: “the ability to read, write, critique and modify computer code in order to create or tailor software and media channels.” Reference has been made to ‘wikis’, probably best understood due to the popularity of Wikipedia, the free encyclopedia. The definition of wiki in Wikipedia is: “A wiki … is usually a web application which allows people to add, modify, or delete content in collaboration with others. Text is usually written using a simplified markup language or a rich-text editor” (Wikipedia, 2014). Markup language and/or text editor software is considerably less complex than ‘computer code’ and is, arguably, at a level of complexity between ‘multimedia literacy and ‘code literacy’ (though this view may be influenced by the authors’ relative illiteracy in the latter).

In the framework proposed by Dudeney et al. (Dudeney et al., 2013), the second focus is on information literacies: tagging, search, information and filtering. The first of these they define in terms of “folksonomies (user-generated indexes of online resources)”, an example of which might be seen in the web application Wordle (Feinberg, 2013), though it might prove to be less enduring than the others with ‘information’ as the focus: using search engines, evaluating and assessing the credibility of documents and artefacts found and reducing their number by selectively filtering searches. (Dudeney et al., 2013, p. 18-25). All of the literacies described in this category would appear to be relevant to students and researchers in the 21st century academy. Cross-referencing them with Lea & Street’s (Lea & Street, 1998) models, they are mostly located within the Study Skills and Socialisation models.

The third focus in the framework of literacies is on ‘connections’. Again in order of increasing complexity they are proposed as: ‘personal’, ‘network’, ‘participatory’ and ‘intercultural’. The first of these refers to the managing of one’s online persona or identity. This is an area Davies (Davies, 2012) gives considerable attention to, describing the process involved as ‘Facework’. Network literacy refers to the ability to make effective use of “online social and professional networks” (Dudeney et al., 2013, p. 29). The more complex ‘participatory’ literacy is similar to the preceding two but with a particular focus on “collective” intelligence. In a similar way ‘intercultural’ literacy is a sophistication of some the skills described previously but with reference to a range of cultural contexts (ibid:35).

The final focus in the framework is on ‘re-design’ and features just one item: ‘remix’ literacy. This is located at the most complex end of the scale of literacies (on a level with code literacy). The concept of remix literacy involves the “ability to create new meanings” (ibid: 37) and is clearly related to the Transformed Practice included in the Multiliteracies Pedagogy described above. It could also be argued to be an example of Lea & Street’s (1998) Academic Literacies model as it involves meaning-making.
3. Digital Literacy in Practice

We will now turn to the key components of the pedagogy of multiliteracies and will attempt to locate them in the context of digital literacies within the general field of EAP.

‘Situated Practice’ – the first component of the pedagogy of multiliteracies – involves ‘meaningful practices within a community’ which must include “experts [who] can guide learners”. It is stressed that the evaluation of situated practice should be developmental and non-judgemental (New London Group, 2000:33). Translating this into the context of developing digital literacy for EAP students we would suggest that a typical Computer-Assisted Language Learning (CALL) class which takes a blended learning approach (some teacher-led instruction and some computer-based) in a context which encourages group collaboration would meet all of the criteria for Situated Practice. The CALL lesson itself might be focussed on any aspect of the curriculum.

‘Overt Instruction’ does not simply mean teaching in a traditional didactic model. It has as an essential component ‘reflective generalisation … [on] the discourses of practice’. A metalanguage which allows this reflection is necessary and evaluation is, again, developmental (ibid:34). In the context of a professional EFL classroom where teaching staff have at least an entry-level qualification it is common practice for lesson aims and objectives to be explicitly outlined and discussed at the start of a class and reviewed at the end. This is particularly appropriate in a CALL-based lesson as the objectives may include both the subject matter of the activity and the enhancement of technological skills through practice.

‘Critical Framing’ requires “standing back from what they are studying and viewing it critically in relation to its context” (ibid: 35). This may be challenging in the context of the EAP students on a preparatory course as there is a potential tension between the teacher’s and the students’ interpretation of the learning context. For example, students may see their aim as ‘passing IELTS’ whereas teachers may want to concentrate on the skills they perceive the students as needing to acquire or enhance. Furthermore, students will be grouped together for pragmatic reasons but within any group of students a variety of contexts will be present. It is therefore very important for the overt instruction to provide students with a clear understanding of the aims of their situated practice in order to be able to critique it effectively. If this is achieved then ‘Transformed Practice’ is enabled.

‘Transformed Practice’ relies on the previous elements of the pedagogy to allow “contextualised assessment of learners and the learning processes devised for them” (ibid). This transformation may be seen at a number of different levels: an individual student may rethink their approach to the use of a particular technology; a teacher may redesign an activity or abandon it in favour of an alternative; a course committee may decide to reduce/increase/remove/implement an aspect of a programme of study.

Fairclough’s (Fairclough, 2000) ‘Orders of Discourse’ may also be relevant to EAP students and problematic for the teacher seeking to prepare them for entry to their ‘discourse community’ (Hyland, 2009). Fairclough points out that the boundaries between discursive practices may be relatively open or closed and that their nature is shifting. (Fairclough, 2000, p. 170) In this case it is questionable whether there is a meaningful ‘order of discourse of contemporary British Education’. It seems more likely that orders of discourse exist within (academic) discourse communities. As Hyland argues, “communities privilege particular ways of making meanings” (Hyland, 2009:54); what is or is not privileged or accepted may vary between departments of a single faculty.

Most UK Universities have a centre or a unit responsible for teaching English language to applicants who are hoping to begin studies at the institution on completion of their ‘pre-sessional’ language course. In many such centres the pre-sessional programmes focus on academic English, preparing the students for their studies in the institution (Obdalova & Logan, 2014). In this regard the pre-sessional EAP may be seen as an exercise in enhancing the students’ academic literacy, mostly within Lea and Street’s (Lea et al., 1998) Study Skills and Academic Socialisation models. The in-sessional EAP work done with students within their courses may be located within Lea & Street’s (ibid) Academic Literacies. Within this set of skills we might include the digital literacies required to cope with a modern university course; these skills will be context-dependant. As with discursive practices discussed above it is difficult for the EAP teacher to have knowledge of digital literacy needs across a wide range of discourse communities.

It might be questioned whether digital skills are the remit of the language teacher at all. The Competency Framework for Teachers of English for Academic Purposes does mention the need for awareness of academic
discourse and recommends the ability to “integrate IT into delivery, to enhance IT skills and reflect academic practices” (BALEAP, 2008, p. 8). This very limited reference to competencies which fall within digital literacy suggests that this area is either considered beyond the scope of EAP teaching or that inclusion is an innovative approach, yet to be widely adopted. The fact that this framework was published in 2008 suggests that an updated version is due.

The more recent BALEAP (2013) ‘Can Do’ competency framework for students also includes very little reference to competencies which might be categorised as digital literacies. The ‘Can Do’ competencies approach to EAP has much in common with the concept of literacy practices (Hyland, 2009). It is worthwhile comparing this approach with assessment of students’ preparedness for study within Higher Education. One of the most commonly used assessment for UK HEIs is the IELTS test (International English Language Test System) which assesses proficiency in Reading, Writing, Listening and Speaking against a 9-point scale ranging from “Level 1 – Non-user” to “Level 9 – Expert user” (IELTS, 2013). For Writing and Speaking examiners assess the candidate’s performance against a set of criteria – essentially making a judgement as to competency. As mentioned briefly above, there is a possible conflict between teaching students to pass the IELTS exam and teaching students the competencies they will need on their course.

The IELTS is currently a paper-based test, though an online version is in development. Competitors in this lucrative market include TOEFL (Test of English as a Foreign Language) and PTE Academic (Pearson Test of English aimed at non-native English speakers wanting to study abroad), both of which are computer-based tests. Preparatory courses which lead to assessment by one of these tests will almost certainly involve a focus on the skills required to succeed in the test. Other than, perhaps, some general IT Skills enhancement, a similar tension between teaching to a test and teaching to competencies exists. This is a potential area for further investigation.

4. Conclusion

In the modern context academic literacy includes considerable need for digital literacies, particularly but not exclusively those relating to information literacy. The activities recommended by practitioners in the field fall into two types: practice of language using technology and practice of the technology itself. It is appropriate and desirable for the field of EAP to incorporate within the curriculum systematic development of digital literacies.

It has also been argued that these digital literacies constitute new practices rather than new instances of established practices. In terms of examples of practice we have only scratched the surface, not least because the new technologies themselves offer a range of materials growing at a speed faster than anything imaginable in traditional print media. Within the field there is scope for further investigation, particularly into the digital literacy practices of different branches of EAP: English for General Academic Purposes (EGAP) and English for Specific Academic Purposes (ESAP).

References


