Reappraising Learning, English and Literacies

Howard Doyle

Abstract

This paper takes focus away from just the English. Instead, it is posited that English-as-language is just one mode of communication even if the major one, rather than discrete English skills such as under an English for specific purposes (ESP) umbrella. In this sense, it is argued that English also can be seen as variable sets of literacy skills that are situated in specific vocational and similar contexts. None of this is new, with decades of research and recorded practice, some of which is brought together to support the view that both people with English as second and also first language can benefit from learning about situated communication in this way. Analogies are drawn from academic and work scenarios to illustrate and support this reappraisal of Learning, English and Literacy. Finally, how English occurs, is perceived and is learned is discussed with reference to emergent Digital Literacies. This leads to some senses in which English could be a literacy. It is concluded that Which (guise of) English? is the pertinent question: as static proscribed form or preferred style; or, as dynamic context-based lingua franca which by nature evolves also requiring people to adapt and so to learn.

Key words: Learning, English, Literacy, English as literacy, ELF, ESP, Digital literacies, Coding.
Workers, managers, employers, instructors and others might all be learners at some time. The obvious place to look is at the coal-face, the screen-face, on the shop or factory floor, at home even, wherever the work is done. Learning what? Different things, but to mediate and negotiate them in context, communication skills rather than language (let alone English) skills specifically, are of the essence.

The communication/language distinction is crucial, yet it is frequently overlooked by stakeholders listed above. One reason is that they are too often actually outside of the communities they laud over.

For instance, an Australian current affairs program (Degrees of Deception) investigating a crisis in international students’ tertiary education in Australia in April 2015 spent about thirty minutes out of one hour repetitiously railing about substandard English skills among students and how graduates of, say, Nursing might be a danger to patients at their work as a result. However never did they mention the word ‘literacy’ nor examine the pedagogy or assessment practices in the specialised and vocational programs in question. Rather the news program’s agenda was political and ethical. Such issues, though of undeniable importance, are scarcely the whole picture. One short interview of two overseas students at home did in fact encapsulate the key issue addressed in this paper. This quoted segment begins with the end of the previous one in which a consultant underlines the language/literacy issue, of students arriving with insufficient skills for doing their courses:

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ALEX BARTHEL [(HIGHER EDUCATION ACADEMIC LANGUAGE & LEARNING CONSULTANT)]: They’re coming in believing that, “If the university says that I require an IELTS 5.5, I believe the university and I trust them that they have told me the truth about what’s required. Now I find that, in fact, to be able to read the text that I’m asked to read in, in my, in my degree course, I find that I don’t understand, er, what it is. I don’t understand the questions that I’m asked in assessment tasks.”

LINTON [REPORTER] (to Iris and Josie [INTERNATIONAL STUDENTS]): You both have such wonderful English but do you think other international students: do you think that’s their biggest challenge?

IRIS: I think it is.

JOSIE: Actually, it is.

IRIS: It is. One of my friends, who came from China - we did a foundation study, so we are really used to it, but he just came straight here, straightaway here and he says he has a headache in English....

(Degrees of Deception [Transcript]. Italics mine)

Iris’s friend ‘from China’ would likely have done some English test like TOEFL or IELTS or an in-house assessment instrument delivered off-shore, achieved a benchmark score, got the visa and rocked up to the institution in Australia to commence English-medium study. If Australia is not an English-only society, English certainly is the prevailing lingua franca. Which English, is hardly considered though. And this is not limited to geographically defined types such as New Zealand, Indian or American English. There also are vocationally-situated, age- and education-situated Englishes for want of typological examples. In fact what is
This paper takes focus away from just the English. Instead, it is posited that English-as-language is just one mode of communication even if the major one, rather than a set language forms used when a particularised set of discrete skills are applied, such as under an English for specific purposes (ESP) umbrella. In this sense, it is argued that English can be seen as variable sets of literacy skills that are situated in and dependent on specific vocational and academic contexts of the sort considered here. None of this is new, with decades of research and recorded practice. Some of this work is brought together here to support the view that both people with English as second and as first language (L2 and L1) can benefit from learning about situated communication in this way.

Literacy ethnographers Alan Rogers and Brian Street (2012) quote a scenario in a work context that illustrates this ongoing irresolvable conundrum:

When Karen first arrived at the Urban Hotel to work as Night Manager, she wrote Banquet Event Orders ‘in full’, in simple, clear English prose. To her surprise it wasn’t well received. She ‘had to be told’ by the workers that they couldn’t follow that kind of writing. …the housemen could speak well enough, but their reading and writing were not so good. They needed the short-hand language of the hotel to do their jobs efficiently. So she learned to use their code”’ (p 66. Italics mine)

Here the ostensible English-as-L1 speaker Karen opts for an alternative hybrid code in order to deal with and get into the business of that hotel workplace community. Karen follows some kind of immersion–cum-acculturation process which ends up being of greater utility value for her and her employees than opting to use ‘clear English prose’. In other words she avoids imposing an institutionalised (English) language variety or ‘code’. Iris and Josie however eventually can run with the English of Australian academia instead of prescribed IELTS exam formulae, as they have chosen to spend an extended time learning literacy and language communication practices that are more appropriate and apparently work. Further, Iris, Josie and Karen are all making choices among certain institutionalised and non-institutionalised pathways available to them. It is this aspect, choice in learning and for learning, to which I wish to return later. First though, presentation of some relevant learning theory is necessary to ground later considerations of the English and Literacy perspectives.

**Learning**

People learn more things than they are taught. Teaching is a way to deliver things to be learned; teaching itself is not learning. Many things are learned incidentally. Many things are picked up sub-consciously. And of course consciously. Many things learned include how to ‘do’ work or ‘do’ study, how not to work or study, how to ‘do’ communication (decoding meaning as well as encoding it), and of course English (or any other kind of lingua franca communication mode). By the way, as Teaching is not learning, just a means to facilitate learning maybe, I shall not be referring to it.

In my own work investigating learning, I started with the question, How do people learn? Indeed, how can
they learn better? From my Applied Linguistics starting point, the only satisfying answers in basic terms simply were that people who have two brains learn better: Jim Cummings’s (1984-2005) Iceberg Model of Language Interdependence and Vivian Cook’s (2012a 2012b) more dynamic Multi-Competence Model (which has a basis in a kind of Sapir-Whorf hypothesis, that people think and do things in different ways because of the cultures they come from) helped. But these models articulate really only towards language. These models also presume learning to have taken place. They are useful however in showing how learning something can be facilitated – if a person can have experience or grounding in more than one environment, then they have more than one way of viewing the world and therefore are able to take in things in alternative ways. These models are shown in Figure 1.

![Figure 1: Cook’s Integration continuum of possible relationships in multi-competence; & Cummins’s Iceberg Model of Language Interdependence. (Sources: Cook 2012b, Best of Bilash 2011)](image)

In the two scenarios described above, it seemed essential to extend inquiry beyond language and include other things taking place. This took me to the generic question, Why people learn? which I found more utilitarian than ‘How people learn?’. It took me out of psycholinguistics to Motivation and fortuitously into the broader Education field. Eventually a cross-disciplinary selection of schools of thought could provide a way forward: cognitive psychologists, Jean Piaget and, Lev Vygotsky (1962 1978); language-learning theorists, Stephen Krashen (1981) and Zoltan Dornyei (2012); Paolo Freire (1972) who could inform on the role of liberating Critical Consciousness (summed up in Table 1); and American contemporary of Vygotsky and Piaget, John
Dewey (1938). Dewey is cited for his usable holistic concept of Environment:

An experience is always what it is because of a transaction taking place between an individual and what, at the time, constitutes his environment … The environment, in other words, is whatever conditions interact with personal needs, desires, purposes, and capacities to create the experience which is had …


Table 1 presents key aspects of the other five theorists’ theories and ideas regarding motivation and why people learn.

Table 1: **Summing Up Piaget’s, Vygotsky’s, Krashen’s, Dornyei’s and Freire’s Ideas on Motivation and why People Learn.**

<table>
<thead>
<tr>
<th></th>
<th>Piaget</th>
<th>Vygotsky</th>
<th>Krashen</th>
<th>Dornyei</th>
<th>Freire</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Young learners’ motivation</strong></td>
<td>Intrinsic (Particular focus on child development)</td>
<td>Extrinsic</td>
<td>Makes no significant distinctions.</td>
<td>Makes no significant distinctions besides passing reference to Life-span Control theory.</td>
<td>Makes no clear distinctions</td>
</tr>
<tr>
<td><strong>Adult learners’ motivation</strong></td>
<td>Extrinsic</td>
<td>Extrinsic, with scope for intrinsic</td>
<td></td>
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<tr>
<td><strong>Features of Motivation ideas</strong></td>
<td>Focus on nurturing personal development; (insecure environment distracts towards overt focus on self.)</td>
<td>Learners respond to and interact with environment.</td>
<td>Instrumental (ie. practical purpose) &amp; Integralational motivation (to be part of culture or community).</td>
<td>Considering learners as people with a range of motivations which can be affective at different times - in dynamic situations motivations can be simultaneous, complimentary or conflicting.</td>
<td>When people perceive their state is not unalterable. instead just challenging, then can they begin to overcome – From here is emergence of consciousness and critical intervention in reality.</td>
</tr>
<tr>
<td><strong>Other significant points</strong></td>
<td>Schemata</td>
<td>Intrinsic motivations follow Extrinsic, and the milieu of the social community is paramount.</td>
<td>Conceiving a ‘word’ as representation of a ‘thought’ concept as nexus of language and mental processing</td>
<td>Key SLA theories: (unconscious) Acquisition &amp; (conscious) Learning</td>
<td>Motivations shift within the complex dynamic context of learning situations and environments</td>
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<td></td>
<td>Significance of stages in sequence of cognitive development.</td>
<td>Conceiving a ‘word’ as representation of a ‘thought’ concept as nexus of language and mental processing</td>
<td>Monitor Theory</td>
<td>Pleasure Hypothesis</td>
<td>Critique of ‘Banking education’ model</td>
</tr>
<tr>
<td></td>
<td>Criticized by some (including Vygotsky) for conclusions based on single affluent child subjects</td>
<td>Conceiving a ‘word’ as representation of a ‘thought’ concept as nexus of language and mental processing</td>
<td>Comprehensible Input Hypothesis</td>
<td>Pleasure Hypothesis</td>
<td>Liberating education incurs cognition, not information transfer</td>
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<td></td>
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<td>Learners are with the world, not just in it.</td>
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</table>
Dewey was one of a few mid- and late- North American 20th century education theorists who inform the present theme. Others include David Kolb on people’s learning styles, including VAK (visual, auditory, kinaesthetic). Though Kolb does not raise VAK himself, VAK is part of how people sense and take in information from their environments and then mentally process it, which is Kolb’s main field. Kolb was interested in experiential learning, as so much learning occurs that way (the main other being higher-order reflective cognition). It ties lots of this together. For Kolb learning as a phenomenon is a nexus of abstraction and reflection, experimentation (as in trial and error) and experience, each affecting mental processing and conceptualizing to different extents. There was also Benjamin Bloom, head of a US public committee to find a workable standardised model for learning in the 1950s, eventually producing a taxonomy of how deeply people do learn. Figure 2 shows recent versions of Kolb’s and Bloom’s contributions. Incidentally, Freire’s liberating consciousness would correlate with the top two or three levels in Bloom’s typology.

Both templates have undergone significant revisions since their origins in the 1960s and 70s but are still taught to students of general education theory. Applications are most frequently classroom situations in which learning can have a social base on one hand, and an individual autonomous one on the other. Yet both incur experience and cognitive processing. I wish I had been introduced to them when I had done my courses and research in the 1990s and I hope people going through Language Teaching and Education programs now are getting their dosages. Kolb and Bloom inform on variation in how and what people learn, and so I give them space here. Yet one gap so far in Learning, which withholds it from complementing Literacy and English, is its social aspect.

Jean Lave’s and Ettiene Wenger’s (1991) notion of situated peripheral learning in Communities of Practice (CoPs) informs and partially resolves this impasse, in as far as when people enter a community they are
picking things up by noticing and also by any interaction with community members in this early stage. This Situated Peripheral Learning borrows from Vygotsky’s Zone of Proximal Development (ZPD, ie. the space between a person being able to learn on their own and needing help from an MKO (or More-Knowing Other person) and Freire’s idea of consciousness with autonomy from (‘oppressor’) institutions (see Table 1). Situated peripheral learning occurs from the point people enter a community (like Karen in the hotel) becoming consciousness of what they need to know meta-cognitively, and on a needs basis of being able to engage with CoP members closer to the center. They may pick up other things incidentally too, usually experientially, sometimes reflectively, often socially. Similar to the CoP sociological concept for which Wenger is best known, Lave and Wenger based their theories on ethnographic field research in which learning takes place. In fact people learning community-related things becomes a means to help sustain CoPs. Also this learning is an activity linked directly and indirectly to the common interests and defining characteristics of such communities (in Lave’s and Wenger’s analyses most were defined by work practices and all involved explicit learning practices). Situated learning of course does not necessarily occur only in CoPs. Iris, the international student in Australia, implies this tendency regarding hers and Josie’s learning in their pre-university bridging course.

To reiterate, the CoP-learning idea only partially accommodates the social aspect of how and why people learn. However CoPs frequently provide a very nurturing environment for learning, especially where the interests of the CoP are vocational, though Lave and Wenger (1991 p78) examine apprentice meat cutters in a supermarket for whom they conclude that learning is all but discouraged in a work-community where interest is organized along capitalist lines and community interests are entrepreneurial. Interestingly this group-characteristic contrasts with Karen as individual manager in her hotel, also a business-work context.

Another issue of course is whether the learning and/or work situations actually are CoPs. A class of learners can be, but only if the class is ongoing and there is much autonomous choice of what to learn, how to learn, and why ( – not so common!), rather than an institutionalized order of learning and of social organization. Therefore from his point on learners are perceived as autonomous individuals, in addition to either as users of English or as individuals possessing or requiring literacies in order to ‘do’ what they need to ‘do’.

English

The common view of English in the world is still Kachru’s (1985) Three-Circles of English (in Figure 3), which is a nation-culture-based zonal model with:

- L1 native-speaker countries in the center where English is presumed to be lingua franca because there is nothing but;
- countries where English is lingua franca or still common for socio-cultural purposes in the outer-circle; and the
- ‘extending circle’ where English is not lingua franca, rather people are generally not good at it or don’t use it.

Traditionally English - especially English learned by people who do not normally use English but who may,
say, go to Australia to study at university – has been identified as English as a foreign language (EFL), or as a second or other language (ESOL). More recently labels like ELF (English as a lingua franca. Samarín 1987, Firth 1996, Seidlhofer 2011), World Englishes (as in the journal name – see Reference), English as a Global Language (Crystal 2003), and Glocalized English (Park 2009) occur, reflecting broadening concepts of what English is. Still focus remains on the English: words, syntax and expressions that people produce as well as on their errors.

A useful ELF model is Pennycook’s (2009) three-dimensional pluralithic model (see Figure 3), which incurs:

- English and other language and communication resources that different people bring with them;
- the context of situation, including what things need to be talked or written about, purpose and other environmental factors; and also
- the (English) language mode that people in the language event tacitly decide to use (e.g. formal style, American English form, even particular media).

Ironically though Pennycook’s model works better as a model for language communication rather than just English – it fits Karen’s hotel situation quite well. In any case, for Pennycook and others including ELF exponents English is better understood as a pluralithic rather than as a singular or monolithic Anglo-American cultural phenomenon (Jenkins, Cogo & Dewey 2011) – hence ‘Englishes’!

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1 English as a Lingua Franca is often presumed to be when English is used as contact language among people whose own L1s are not English (see Jenkins 2009 pp 143-145 for explanation of this perspective). In this paper, rather the ‘Lingua Franca’ aspect is emphasised: English as presumed if not actual contact language between anyone be they are L1 or L2 users of English.
But it does not end there, it cannot. As is observed with Literacy later, people can belong to more than one language community and can shift language behaviour during a language event, and all of that can change over time – a fourth dimension. So, if there are multiple English options among multiple people, it is like having five dimensions – or parallel universes! Further, Suresh Canagarajah (2013) makes a point on different behaviour and assumptions about appropriate language behaviour in his book on Translingual Practice: that is that code-mixing with and code-shifting into local languages are common, accepted and even normal in southern Asia, transmuting English (if it is apparent at all) into forms quite unfamiliar to English purists and, well, unfamiliar even to people just outside of those locales. The situation in Karen’s hotel, is not extreme like that, though the workers reportedly had to tell her about their situational preferences. Canagarajah (2013 p 26) also observes European language culture tradition preference to differentiate clearly among languages in, say, what is English and what is not, though such demarcation is not a big issue in post-colonial English contexts (the Singapore Ministry of Education notwithstanding. See Doyle 2011).

So, there are not just different Englishes in the world, there are also different attitudes to its use and ways to use it, even down to local levels. What to learn then? Two answers in this paper so far are obvious: one is the local English, whatever that is. The other is English as tool, or English for meeting particular needs. Andy Kirkpatrick (2011 p 179 186) makes this type of suggestion – English for the local culture - in a book on English in South East Asian contexts. Meanwhile a few years earlier English-language futurist David Graddol (2006) suggested that English would become like a kind of literacy skill, maybe around the 2020s as a wide body of the world’s population became competent with a basic repertoire of English partly shaped around their local situations but with a recognizable common core. Further, the people learning English would also be competent in one or more other languages – at which point Cook’s and Cummings’s psycholinguistic models shown earlier, about people being able to mentally process language knowledge in multiple ways, become relevant too.

Thus, English language in different guises, including as literacy skill, is a point. But is it a workable paradigm?

**Literacy**

Earlier I used the terms, ‘language events’ and ‘practices’. I draw these from the Literacy field originally, literacy events and practices. The grounding of these fundamental concepts is well known, lying in ethnographic work by Shirley Brice Heath (1983 2012) in communities in the regional south eastern United States and Brian Street (1984) in rural Iran and elsewhere. Street (1984) further developed a dichotomy of literacies, dominant and vernacular. There are parallel concepts, such as formal and informal literacies respectively (Rogers & Street 2012 pp 65-66), and even Top Down and Bottom Up (terms borrowed from L2 acquisition research schools using respectively structured theory first or more fluid theory later, but which coincide with more organized institution-sourced discourses as opposed to less structured non-institutional ones. See Ellis 1994 p 678). Even I suggested a further parallel conceptualization earlier, ‘Institutional’ and ‘Non-Institutional’ Learning, though I depart from the notions of language/literacy practices mainly on the basis of where choice of how and what to learn lies. In short there is a kind of common dichotomization dynamic extending across
learning, language and literacy: essentially what eventuates from outside the situational context and what evolves in or from within.

So far I have tried to identify significant overlap among Learning and (English) Language paradigms in order to articulate the nature of English for learning and work. There is also ground more specifically situated in the literacy domain. In the two scenarios referred to in this paper, one about learning the other based in a work context, Literacy Practice as a concept is the common ground. Iris and Josie identify the nature of their being able to cope in that they have received induction through a specifically directed bridging program inducting them into the practices of the Australian academic culture in which they find themselves. In contrast their ‘friend’ (and countless others) just do the test and ‘just came straight here, straightaway here and he says he has a headache in English’. Iris and Josie would have studied academic English, a kind of English for specific purposes (ESP), accompanying academic literacy practices plus some grounding rationale for those practices and the culture in which they occur. The distinction between the English aspect and the Literacy aspect can be perceived respectively as either English taking precedence, or Literacy:

1. accurate and appropriate English language forms to use in Australian academia on one hand and the practices required for the use of that English: OR,
2. it is the distinction between learning local ways in which discourses in ideas, information, opinions, attitudes and feelings are conveyed there, skills for taking them in, for learning, skills for articulating what they learn and also for applying what they learn appropriately and understandably to other people in that local culture, which largely just happens to include using English.

What culture – university, the discipline or vocational field, or just in Australia – is a different issue not immediately relevant. Whichever culture though, ‘English’ is claimed to be, is designated, or just is the default lingua franca, and the primary language mode for communicating those discourses. Sadly though, ‘English’ is rarely qualified in this way, rather just as ‘good’, ‘proper’ or ‘correct’.

On the point of discourses, another key contributor of Literacy paradigms since the 1980s, James Gee, provides the notions of Primary Discourses (ie. the ones a person grows up with, naturalistically and otherwise) and Secondary Discourses (ie. what a person moves into later in life). Primary discourses can be a basis for dealing with secondary discourses later on in life. He also discusses discourse communities, including the idea that people can be members of multiple discourse communities simultaneously. Traditionally discourses were articulated in print text, so Gee notes, and traditional understandings of literacy involved being able to read and write written texts. Gee’s own concept of literacy is a bit more abstract: “Mastery of a written text” (2012 p 173). I say abstract because Gee does not understand ‘written text’ as just the tangible writing on paper, in the sand or on a plasma screen. For Gee it means being able to make Text and also being able to make sense of it – and to do so means learning how to do it (p 174).

However, language and communication media nowadays are more complicated than just written text. For instance mixing spoken- and written-style registers in chat-type texts on mobile phones with options for emoji graphics and mixing vernacular, languages and even scripts; and how to do it depending on where one is and more significantly on the nature of the community among whom one is communicating. Young people in their communities have grown up with all this. Older people like me have had to adapt to such new modes for
everyday communication, not just the codes but to using the hardware to encode them – even fifteen years ago Marc Perensky (2001) labelled us ‘Digital Natives’ and ‘Digital Immigrants’ respectively. So, understandings of Literacy necessarily evolve into mastery of those media as well as being able to tell about and not just use them.

Hopefully it is evident how easily this understanding is manifest in Iris’s and Josie’s confidence with practices involving English in an Australian academic context on the one hand, and on the other hand Karen’s taking up of the local shorthand code at work in her hotel. But in these scenarios, what are the links with English and learning? That is easy too – the literacy practices (more explicit in Karen’s scenario) involve English (or some variation on English in Karen’s case). Also the literacy practices are learned; and not only that, Karen, Iris and Josie did make autonomous choices to learn them. Though they chose to follow pathways involving dominant literacies (ie. Australian academic English, and the shorthand ‘code’ of the hotel workers), they seemed to have made conscious, informed choices. In other words, each apparently knew what she was getting into. Channelling Freire, Gee calls this ability to make informed choices “liberating” (2012 p 175). So, Literacy as knowing what one needs to know to be able to make choices about how to do something and to follow those choices up.

Learning, English and Literacy: so what?

So far this paper gives a superficial overview and re-examination of some key concepts in Learning and in Literacy developed in the mid-to-late twentieth century, in relation to English then and now. Those concepts still appear quite relevant in a field that grows ever more complex and contradictory. Regarding English, Karen’s scenario at work is fairly straightforward, primarily because it is extremely local (ie. a work section inside a hotel). Iris and Josie appear in a current affairs program reporting on the Australian university education sector, a far broader and therefore less ‘local’ context. In the news program, these two were the only stakeholders engaged in the Learning-English-Literacy business on the ground. The interviewer was on the outside though with an obvious investigative agenda. Yet the various education agents, university teachers, academics and administrators interviewed were from the institutional structures – they were at the top. All of them commonly discoursed on English and learning in the traditional way, talking about IELTS test scores and essays containing correct English – reflecting the banking education approach that Paolo Freire severely critiqued in the early 1970s. I was inspired by Iris’s and Josie’s grasp of the stakes involved, realising that they were having success dealing with secondary discourses of the new academic culture, being able to ‘do’ the English required to cope in that culture, all in order to attain their goals.

Doing English is a euphemism with a nuance of action or activeness. The traditional idea ‘doing’ English or any language is ‘speaking’ by ‘speakers’. Similarly, the traditional ‘doing’ literacy idea is reading and writing – consuming and producing – written text, and traditionally it is seen as just that simple. Nowadays digital media distort these older patterns as suggested before. For instance, so many education providers are switching to more economic online delivery, which essentially individualises learning and can isolate the

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2 ‘dominant’ in this case because Karen is entering ostensibly a culture that is somewhat detached from the culture in the rest of the hotel – she is in a peripheral learning situation as in a community of practice discussed earlier.
learner. A social alternative could resemble online gaming which often is done in gaming communities (the view in a worthwhile paper by Ryu 2011). While the older theorists of learning, and literacy cited here have largely retired or passed away, curiously James Gee has engaged with digital literacies in his writing since the start of the 21st century, though he is more interested in utility for learning that lies in computer and online gaming (Gee 2007). Channelling Vygotsky, he observes, “Well-designed games are good at working within players’ zones of proximal development” (Gee 2015 p 124 Table 19). But games are just the applications of computer programs end products. Making them involves much else that still is relevant.

Digital Literacies, English and Learning

Later in this section a government curriculum for computer studies is examined, at which point the wider spectrum of digital literacies under the same umbrellas as computers – and not just their operation - is considered. But just now the limitation of Gee’s views on computer games was mentioned, in that he does not consider the making of games programs with which he interfaces, in other words the programing. There is one other component domain of digital literacies: making the hardware. Three generic domains of computer and digital literacies can be illustrated in this way: asking a modern teenager if he or she can use a mobile phone, and they are likely to answer Yes; ask if they can make an application program (or ‘app’) to use, many would say No though surprisingly many could say Yes; but ask if they could make the phone itself, and answers would inadvertently be No. Another perspective is evident in a general statistic (quoted on www.quora.com), that in 2014 18.5 million people worldwide knew computer programming, estimated to be just 0.3% of the global workforce! Thus Computer (or ‘Digital’) literacies can be categorised as three types:

1. Constructing a digital processor (the hardware) – rarer, a more complex specialist field
2. Constructing programs (the software with programing/coding) – less rare, increasingly mooted as mainstream literacy
3. Operating digital processors (such as everyday use of computing and smartphone operation) – common so as to be presumed normal in many contexts

Making and using computers are like any other task or activity requiring specific knowledge and skills. Also, they do not necessarily incur English. Computer processors of all kinds are used in many places in the world without English. Why then is English relevant? Because so much communication and information is stored and communicated in part or whole in an English-language medium. Further, in English language-based cultures of course English is the presumed basis of communication with digital technologies as with everything else, the factor that has set off discussions in this paper. The other factor is historical: the political, economic and cultural ascendency of nation states and corporations whose business has been dealt with in English. The surprisingly everyday example is the simple universal email address form: name + @/at) + domain, similar to a noun followed by a locative qualification like this, The train (which is) at the station. This follows an English grammatical order, and a reason for that is that email developed first in the United States where for the early information technicians English has been the presumptive lingua franca, so much so that the issue of grammar of a language may never have occurred to them. An email address actually is part of a program code. Ironically though it is not on this point that English is significant.
English is significant in relation to the meta-functional aspect – when people talk about computers telling what they know, including while they are teaching about them. Traditionally this was a part of what people referred to as ‘computer literacy’. Nowadays, the expression Digital Literacy is more in line with the basis of the technology, digitized information ordered by programs which follow man-made codes. The practice of making these traditionally has been referred to as Programming. Programming now is more generic than the more specific term, Coding, which refers to actually making the programs using computer languages. This is explicated more clearly later. Meanwhile, ‘Digital Literacies’ refers to knowing about and being able to do practices that are identifiably relevant to Digital Literacy. From now relevance of English to Digital Literacies is discussed in relation to two cases related to learning about them in Australia. Australia is chosen for the pervasiveness of English in everyday life there, including with computers, so that English is presumed knowledge and skill to the extent that people recall to think about English usually only when this presumption is disrupted. This also can show up issues raised in preceding discussions in this paper.

i. A Coding-Learning Event

Regarding English (or any language), digital literacies involve three aspects: blends of traditional spoken and written language protocols; intertextuality and intermodality; and the new skillsets – literacies – for being able to ‘do’ them. This is best seen in education agendas for younger learners at school who are subject to institutional learning normally.

For instance in mid-2015 Microsoft Corporation sponsored an Australia-wide workshop for school-age children to learn the basis of coding, or how to make digital software applications (‘apps’) (Students learn coding at UTS), partly because such learning programs had been quite rare in schools there. Also, the Minister for Communications addressed and introduced the program to participants in Sydney Town Hall. In this instance a large computer company and a leading politician representing primary institutions in the community, recognized and initiated learning for new ways of doing things with new media (whether for entrepreneurial or publicity purposes or not is another matter). Regarding English, it will be interesting to see:

・ if other institutional stakeholders in the business of learning, English and literacy can have a similar shift in consciousness as Microsoft and the Minister; AND
・ if as many users of English as their first or only language take up learning the register of the new media (eg. the name of the program itself is “#WeSpeakCoding”) as might users of English as L2, and who would be more successful.

For once English is not the priority. Coding is. Though English is the language medium for mediating ‘coding’ literacies, coding as a set of digital literacy practices are what are to be learned.

So, English-for-coding does not matter? Of course it does matter if people do not know English register or jargon for coding. Still, in the context of the #WeSpeakCoding event, suitable English repertoire is presumed knowledge. If suitable English is not known by participants, is it a problem? To an extent of course it is.

3 At the time, Malcolm Turnbull, who subsequently became Prime Minister of the Commonwealth of Australia on 15 September 2015
'To an extent', because there is a moderation effect brought by whatever digital literacies relevant to coding that learners bring with them to, say, the #WeSpeakCoding event. However, also, if learners have sufficient English and digital literacy competence, double-lucky; if neither, obviously an immediate disadvantage.

The upshot of course is that if learners have acquired knowledge of coding somewhere else, in a non-English speaking place then, say, the lack of English can be moderated somewhat. Who might be relevant cases? Someone like Iris’s and Josie’s friend who did only IELTS, if they had relevant skills/knowledge (ie. literacies) from back home. Bringing literacies from a non-English language culture is not a new concept or phenomenon. For instance, in a chapter on Plurality of literacies as skills or things people can do Sandra Lee MacKay (1993) refers to Vietnamese refugees resettling in Australia bringing salient literacies with them though having to learn English in the Australian Adult Migrant English Program (AMES) in the 1980s. However people bringing just literacies with them is not enough. Instead the enabler for Learning is if they can be sufficiently conscious of their relevant knowledge or skill to apply those literacies in another, new context – the top level order in Bloom’s taxonomy of learning cited earlier.

ii. A Coding Curriculum

Amidst modern onset of digital literacies, communal consciousness of them and the need to get to grips with them - as #WeSpeakCoding events signify - naturally there is an institutional shift in consciousness about what should be learnt and certainly what to teach. If the most recent update of the local New South Wales state government Kindergarten to Year 10 Curriculum document is any evidence, that institution embraces the new digital literacy regime. It foresees community and economic need for children’s computational thinking to solve problems, thinking algorithmically to formulate problems in the first place, and to be able to program through coding. This all means “a ‘high level’ programming language is used to instruct a computer device to perform certain functions” (k6.boardofstudies.nsw.edu.au) across the curriculum.

Though local in the Australian institutional education context, the NSW curriculum appears like a new dominant/formal/top-down/institutional voice trying to second-guess a perceived vernacular/informal/bottom-up/non-institutional literacy set. Only time will tell how timely or accurate this planning is. Mention of English is glaringly absent in the coding curriculum document, except that school English teachers “may emphasise areas of focus, such as computational thinking, and its application in the real world” (k6.boardofstudies.nsw.edu.au) – and that is all! This is not to criticize the NSW state government and Australian education institutions like the AMES which otherwise do promote and provide extensive English and literacy support to adult and in-school special education. Interestingly there is provision for “mandatory” attention to computational thinking for the Languages Other than English syllabus. However, actually for Mathematics, Science and Technology, and other disciplines, roles for computational thinking are simply described and discussed in the NSW curriculum document much more than for coding itself (!).

Meanwhile out in the unprotected real world, public and private discourse, such as in television current affairs programs like Josie and Iris appeared in, there is still talk about the over-riding requirement for English skills when they are perceived to be missing.
Institutional downplaying of the presumption of English on the inside of this local community, and playing it right up for people coming from the outside, are not going to affect the reality on the ground too much: English (or some language) is required for traditional text-based, digital and other literacies on one hand. On the other hand people tend to bring to bear prior knowledge and skills to cope or survive anyway, and these can include pre-existing language and literacy practices, including of English.

### iii. English for Coding

This section considers a wider picture than the situation of English and coding as digital literacy in Australia. An online search for courses linking English and Coding in Australia turned up several tertiary level direct entry programs in which there was scope for students to choose specialist pathways for their academic English studies within college institutions. These are the kinds of programs that Iris and Josie had been in before commencing their main pathways of studies. Otherwise it is common to require students to have quite high English test scores (6.5 or 7 out of possible 9 for IELTS, or 85 to 90 for TOEFL IBT) to commence these courses. In other words regarding Coding (and many other vocational skill-based fields) we arrive back at the same situation as described at the start of this paper with the potential for people to complain about students’ and graduates’ English if they have not acquired an English repertoire that they are presumed to need. However, this is within the ELF milieu of Australia. Outside of Australia there seemed few programs doing both English, say for use in normal life (which is different from learning English as a language system on its own which frequently occurs in a ‘General English’ course) and anything to do with computers. One such course in a language school for school-age children markets a three-level coding course in Hong Kong. However it never refers to English or English skills in its marketing text, even as a bonus learning point or possible medium of instruction (http://www.esf.org.hk). In the Hong Kong context, there already is a complex culture of English which is being increasingly influenced by vocational, economic and similar cultural requirements in relevant contexts. Yet people there have the common translingual option to use their Cantonese or Mandarin repertoire even in the same language event. This raises questions: is English downplayed as there are options to use other Chinese languages? Or, is adequate English repertoire a presumed quality among students doing the course? Further, is there any initiative to mix learning English with learning coding? Or Chinese languages with coding?

Obviously all this needs far more investigation than I have space to report here. Still, the point is that there is an apparent separation of learning English and learning coding that seems common – no ESP for coding. And still, are people going to complain when they encounter people at work doing, say, coding, who also cannot interact with others using English on a normal everyday basis? Predictably yes, in a place like Australia or anywhere else where people have to interact using English on a normal everyday basis. But predictably less so where English is less requisite such as in a school or company in Hong Kong.

It might seem that I have been searching for a nexus of coding and English here under a digital literacies umbrella, and I have. I could find one relevant area of development though: coding using plain English language. For instance, an item in the computer magazine *PCWorld* in 2013 described Massachusetts Institute of Technology research to develop an “input parsing program” (Mulroy 2013). This is basically an algorithm...
for turning syntax and semantics in a person’s plain English into a computer code language. The article also mentions the issue of pragmatics awkwardness as a variable. In a sense ‘input parsing’ is just like a sophisticated translation program. It makes great utilitarian sense in theory: the need to mix English with coding is made redundant somewhat. In practice though, use of plain English could be substituted for any other plain language, such as Arabic, Mandarin, Korean, Russian, Farsi or Pashto. As well, the technology may still take some time to achieve such a level of development as to become practicable.

To sum up, English occurs under the digital literacy umbrella as a modus operandi. That means English use is still limited mainly to meta-functional purposes. This is of course also an aspect of any literacy – being able to talk about it in some depth, enough to make a choice about it. In an ELF context (as seen in academic and vocational circles in Australia) there are many more scenarios requiring English in normal daily life for which people need to learn English. There can be intrinsic and extrinsic motivations for this: including the sad social and cultural purpose of fitting in, being accepted or even tolerated there by some people who normally can think and act only as far as the English. In contexts where more specialised variations on English have evolved the problem is the same, except that the English is not going to be the same as other Englishes (think Karen’s hotel-work situation). Beyond that of course there are also many situations in the world where English is not so de rigour.

‘English’ as a Literacy.

It is easy to single out ‘English’ because its base language forms, attendant styles and pragmatic behaviours are culturally pervasive phenomena. As in the NSW Coding curriculum or Australian academia, English is not a substantial issue if all is presumed to fall within local ELF cultural and community boundaries. But regarding interlopers from beyond those boundaries, general calls for English are duly made even by those stakeholders who should know better. The better consideration though is which English:

- special corpora or sets of formulaic protocols - can be proscribed, codified, taught, tested – like any other commodity;
- institutionally preferred styles – maybe prescribed but language forms do evolve anyway; or
- lingua franca for and from contextualized social interaction – can be learned though proscriptive codification is impractical

The first two guises of English are easy, as they can be explicated and prescribed because they are viewed as static. They become awkward if they do not fit – like pushing purely IELTS in Australian academia or standard written English in Karen’s hotel’s housekeeping section. Equally they occur as part of the literacy base required to function, say, in the #WeSpeakCoding event, or built on for a separate, specific purpose agenda, such as coding in the NSW curriculum.

The last guise is more organic and can be self-sustaining detached from any institution; it can be learned but is difficult to pin down as it is naturally dynamic. If an ELF is considered a literacy, that literacy is not just English language repertoire such as mastery of its form and style. It is also being conscious of the nature of language, in this case English, to evolve and alter in the context and out of it. That is part of a wider
meta-cognitive aspect, knowing that the language is going to change or shift or draw in register or forms from outside. Adapting to this can produce an extrinsic motivation in the people to adapt and in so doing to learn, on their own or with help from another. In this sense English as a literacy necessarily incorporates this learning behaviour aspect.

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