'Only Connect'? Complexities in International Student Communication

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ABSTRACT This article explores the potential and limitations of international educational collaboration using the concept of *connection*, a term with different meanings that are sometimes conflated to produce unrealistic expectations of computer-mediated communication (CMC). The authors explore the use on the Internet of the 'only connect' quote from *Howard's End*, in order to critique technological determinism and advocate an alternative approach that recognises the interpretive flexibility inherent in CMC. In a communication-rich experience such as education, the limitations of CMC are evident, particularly for non-native speakers, but the medium does offer some advantages over face-to-face communication. The authors introduce the notion of 'cool webs' to understand some responses to the challenges presented by international student collaboration online, illustrated by examples from the Collaboration Across Borders project.

Introduction

Much is promised for those who connect to each other via the Internet – exchange of knowledge, new relationships, strengthening of old ones, pleasure, buying, selling. In this paper, we unpick the rhetoric of 'connection' in the context of international computer-mediated communication (CMC) in education, in order to explore effective modes of communication. We contrast the expectations placed on CMC with what is appropriate and achievable in an international educational context. Though primarily an exploration of ideas, the article uses examples from a current project on international online student collaboration, Collaboration Across Borders (CAB), in order to highlight issues and possible strategies to maximize student learning and increase student satisfaction with the learning process. To date, the CABWEB portal created by the project has hosted 13 collaborative activities involving students and tutors from 21 countries.

Connecting Online

Only connect! That was the whole of her sermon. Only connect the prose and the passion, and both will be exalted, and human love will be seen at its height. Live in fragments no longer.' (Forster, 1910)

Only Connect

We first came across this quotation in 1998 in *Virtual Teams* (Lipnack & Stamps, 1997, p. 187). Lipnack & Stamps use the Forster quote at the beginning of a chapter about the media links that support global electronic connectivity. The concept of 'connection' is a powerful one. The verb 'to connect' has several definitions relating to the connection of people by different ties, and to the connecting medium; for example:

1. trans. To join, fasten, or link together: said either of the personal agent or of the connecting medium or instrumentality.

•••

4. a. To unite (a person) with others (by ties of intimacy, common aims, or family relationship). (OED, 1989)

The first of these definitions suggests a simple instrumental link between people or things, while the second implies a stronger inter-relationship between people. The instrumental connection offered by the Internet supports communication between people in different geographical locations and, specifically, asynchronous tools support communication between people who may wish to communicate at different times.

Understanding Online Connection

The concepts of continuities and discontinuities have been used to define what is meant by virtual work. Discontinuities are gaps or a lack of coherence in aspects of work relations, tasks or settings, whereas a continuity can be seen as 'a collective understanding of some aspects of the work environment' (Watson-Manheim, Chudoba, & Crowston, 2002, p. 200). By bridging differences in time and space, CMC is a continuity, and can be seen as a more powerful medium for connection than preceding technologies of telephone and mail – instrumental continuities. Other continuities include shared motivation and understanding of tasks and each other. On the other hand, the capacity for misunderstanding presented by lack of social cues and cultural differences can be seen as a discontinuity to be overcome. Although Lipnack & Stamps are clearly aware of the huge disparity in people's position within the network age, and that effective human interaction requires more than being electronically connected, their book is nevertheless imbued with a strong sense of a utopia offered by the digital, a message that is reinforced by the use of Forster's quote.

The internet is an electronic technology that makes it possible for people to 'only connect'. The Network Age is all about the ability to develop relationships that endure across space and time. Geography is no longer a barrier to people's capacity to work together (co-labor, hence the word collaborate) and braid communities. (Lipnack & Stamps, 1997, p. 189)

'Relationships', 'endure' and 'community' are words that relate to the second meaning of 'connect' given above – the uniting of people by ties of intimacy or common aims. This interpretation of 'only connect' is reflected in the websites, blogs and articles relating to the Internet that also use the Forster quote, a sample of which are given in Table I.

Resource	'Connection'		
Weblogs	The connections from an individual (the blogger)		
Only Connect blog 1 by Stephen Harlow at:	use the words 'Only connect' in their title to		
http://home.clear.net.nz/pages/stephen.harlow/	convey this concept. Only Stephen Harlow		
Only Connect blog 2 at:	elaborates how:		
http://www.onlyconnect.com			
Only Connect blog 3 at:	'connecting with new and challenging concepts		
http://puravida.typepad.com/only_connect/	connecting related concepts		
	connecting with original-thinking people		
	connecting my colleagues with relevant		
	information.'		
Websites	Connections are around a common purpose.		
1. The personal history, adventures, experiences and	'Only Connect' is used as a title, and the concept		
observations of Peter Leroy:	is not elaborated.		
http://www.erickraft.com/markdorset/misc/			
onlyconnect.html - author promotional site			
2. Tafe frontiers			
http://www.tafefrontiers.com.au/OnlyConnect/			
default.html - flexible learning resource providers			

3. The graduate caucus of the Association of Canadian College

and University Teachers of English http://www.sfu.ca/%7Eokeefe/gscaccute/connect.html

4. Cambridge local exchange trading system http://www.onlyconnect.connectfree.co.uk/index.html

 Publication
 Author Dr Joel Orr links the quote to the design

 http://www.machinedesign.com/
 process. 'Find a way to connect the "prose" of documentation with the "passion" of the design process.'

Table I. Use of 'Only Connect' quote on Internet sites.

The use of 'only connect' as a label for an Internet space somehow suggests that the two meanings of connecting come together. 'Only connect' is a false promise if it is interpreted as enabling us to achieve exaltation, passion and human love simply by making connections via CMC. It conflates the act of 'connecting' within large and geographically distant groups with what occurs within intimate personal relationships that are carried out largely within physical proximity: two very different ways of connecting.

Where Telegrams and Anger Count

So what is the appeal of the Forster quote to those concerned with human connection via the Internet? Technologically mediated connection can hardly have been in Forster's mind when he wrote the novel *Howard's End* in 1910. This was the period between the death of Edward VII and the outbreak of the First World War, when British society was on the brink of huge social change. Although a telephone system was in place, it was available only to a very limited sector of society and communication was largely face to face or by letter.

In *Howard's End*, Forster explores a more sophisticated conception of connection than a purely instrumental one. He is interested in the connection between the world of the intellect and the world of commerce. Forster also explored connection *within* a person between the cerebral and the practical. The 'only connect' quote characterises the attitude of the intellectual Margaret Hegel towards her project of helping Henry Wilcox, the successful businessman, to become a more loving and expressive husband. This is a change that will take place by 'quiet indication' rather than by talking, but sadly this is a project that does not work out as intended. By marrying Henry, Margaret has attempted to bridge the worlds of the private and the public. Earlier in the story, Margaret said to her sister Helen: 'The truth is that there is a great outer life that you and I have never touched – a life in which telegrams and anger count. Personal relations, that we think are supreme, are not supreme there' (Forster, 1910, p. 28).

A significant element of email and online discussion forum communication today is closer to 'telegrams and anger' than to fulfilling and intimate face-to-face personal relations. The richer view of connection presented by the whole book is even more complex than Margaret's who, in the 'only connect' speech, characterises connection as being challenging, intra- and inter-personally. The book contains many symbolic testaments to the difficulties that people find in bridging classes, lifeworlds and people, despite their best intentions. The message is that for people from such different worlds and attitudes to achieve connection at the level of personal relationships, much more is required than instrumental connection – exactly the converse of what is implied by utopic claims for the Internet.

What is so interesting is not that the quote is misused, but rather the reasons why exponents of CMC should adopt this strong call for personal connection as a call to action within a work setting. The use of 'only connect' in Lipnack & Stamps and in many of the examples in Table 1 exemplifies the philosophy of technological determinism. This belief in the power of communication to break down barriers, to 'connect', echoes some early claims for the liberating and democratising effects of CMC (Kiesler, Siegel & McGuire, 1984) that have been called into question by later research identifying the importance of social and cultural contexts – for example, the gendered nature of CMC (Herring, 1994). Technological determinism in the context of CMC

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leads to the view that 'social outcomes derive primarily from the material characteristics of a technology, regardless of users' intentions' (Markus, 1994, p. 121). This determinism can be associated with what Lamb calls 'informational imperatives', persistent visions associated with adoption of information technology, simplifications that tend to maintain the gap between expectations and practice (Lamb, 1996). An instrumental use of 'only connect' tends to raise unrealistic expectations of CMC.

In this article, we adopt a heterogeneous approach, taking the view that relations should be seen as both social *and* technical (Law & Bijker, 1992), and that sociotechnical ventures such as CMC exhibit interpretive flexibility.

Challenges and Opportunities of Online International Communication

CMC is widely used in education as it has been viewed as having the potential to generate new knowledge by building on the expertise and views of individuals (Kling & McKim, 1998). It can also support communication between people separated geographically, and hence has been used to support international student communication and collaboration (Van Ryssen & Godar, 2000; Rees & Preston, 2003; Swigger et al, 2004). In this section we will briefly review some of the areas of research which indicate the potential benefits and drawbacks to international students of the online mode of communication.

Intercultural Aspects of Online Communication

Claims are made for the internationalisation of education (Leask, 2001; Edwards et al, 2003) as a means of giving graduates the skills to work in a global world. Yet online international communication can present challenges to students (and teachers), because it is intercultural and highly mediated. Although discursive practices seem increasingly to 'flow' across the boundaries of language and culture, this is not simply convergence of those practices, but rather their appropriation and accommodation in different contexts, with different local outcomes (Fairclough, 1996).

In intercultural communication, emotions are associated with perceived linguistic and cultural barriers (including educational context), the subject of analysis in Spencer-Rodgers & McGovern (2002) and Stephan & Stephan (1996). As Simard reported (in Smith & Bond, 1998), when focusing on a potential friend from the other group, English and French interactants perceive that it is more difficult to know how to initiate conversation, to know what to talk about during interaction, and to be interested in the other person than when they considered a person from their own group. In the case of online communication, the high level of uncertainty, 'endemic to the global and technologically based environment', was reported by Jarvenpaa & Leidner (1998, p. 2) while analysing interaction in a global virtual team. The anxiety of learners of the Spanish language about online communication with native speakers, as well as discomfort that their limited Spanish did not allow them to fully express their ideas, was reported in Lee (2004).

Anxiety and Misunderstanding

Although online communication can minimise inhibitions because of reduced social cues, it can also be prone to increased misunderstandings for the same reasons. The social cues affected are gesture, facial expression and body language, and the loss of these can exacerbate student frustration (Hara & Kling, 2000). All of these limitations of online interaction can increase levels of student anxiety and uncertainty, especially when they have to communicate with strangers, and that communication takes place in a foreign language. A significant level of personal abuse has been observed between students using CMC without tutor participation (Light et al, 2000). The preservation of discussions as text in forums or in archives permits re-reading, offering the opportunity for reflection on dialogue and (possibly negative) interpretation and re-interpretation of messages that may have been posted casually. Emotion-laden communication is highly likely to be misinterpreted and cause more damage (Salmon, 2000), and because of interpretive flexibility

emotion may be misread – 'flaming is in the eye of the beholder', according to Thompsen & Foulger (1996, p.227).

Socialisation is an activity that learners may initiate themselves or be encouraged explicitly in by teachers, as in Salmon's Five Stage Model of interactivity and learning in CMC (Salmon, 2000). Reeder, Roche & Chase (2004) confirmed this in the case of online interaction. They reported that in a discussion forum, students from different cultural backgrounds tend to employ different anxiety management strategies, with varying degrees of success. For example, in introductory messages they gave information about themselves in ways that reflected their experience and the influences of their educational and group cultural 'programming'.

Social Learning and Learner Interaction

Hung & Chen (2001) build on Vygotskian principles to explore the social learning that can take place in online learning communities (Hung & Chen, 2001). Vygotsky, recognising the social nature of learning in the early twentieth century, identified the Zone of Proximal Development (ZPD), where students can complete tasks with the help of a teacher or more experienced peers that they would be unable to complete alone (Vygotsky, 1978).

Similarly, Roed (2003) sees the mission of CMC in language learning as 'scaffolding': gradually giving anxious students more confidence to embark on conversation in the target language. Salmon (2000) shows introduction and socialisation as the first two facilitation stages of a five-stage model that also shows a progression of technical 'connections'.

Many studies (e.g. Webb, 1985) have been conducted on the act of verbalizing, especially when it involves explaining something to someone else, as explaining can lead to cognitive restructuring. When students experience conceptual conflict with others, it forces them to re-examine their own understanding and seek resolution of opposing viewpoints (e.g. Mydlarski, 1998). This kind of constructive conflict is part of the collaborative model, which, if applied in a second language setting, has potential for highly productive language learning.

Summary

To summarise, CMC simultaneously brings opportunities for learners and presents difficulties for them. If learners are able to grasp these opportunities and overcome the difficulties, they can realise the benefits of improved cultural literacy and improved global employment skills. Learners, particularly those communicating across cultures and/or in a second language, may be anxious about their communication skills. To alleviate this anxiety, they can adopt their own strategies and be supported by 'scaffolding' behaviours of teachers and peers; all of these behaviours can facilitate both online and offline interaction.

'Connecting' on the Collaboration Across Borders Project

Seeking to realise the benefits of online international student collaboration in higher education, the Collaboration Across Borders project built the CABWEB portal, using the open source software Moodle. The CABWEB concept and facilities are based on research into international online collaboration from the literature, and from the experience gained from pilot studies since 2000. CABWEB offers two different types of collaboration opportunities: networks and collaboration spaces. There are two networks, currently facilitated by project partners: the Higher Education Learning Professionals (HELP) network for tutors who wish to organise collaborations; and a fledgling student network, where student members of the portal can socialise.

On request, tutors are allocated a collaboration space in CABWEB that they can configure to suit their planned collaborative activity, adding resources and using the collaborative tools available within the Moodle toolset. Thus, the CABWEB portal offers opportunities for students to engage in tutor-planned and self-directed communication with their fellow students from other courses and countries.

Whilst international online student collaboration (such as on CABWEB) does present opportunities, there are also challenges and barriers presented by the limitations of the technology,

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and by linguistic and cultural differences existing between students. Tutors and students need to do much more than 'only connect' via the medium of the Internet if they are to really 'connect' as learners, and in an educational setting this will be more appropriately in pursuit of common aims than of ties of intimacy.

Because tutors are operating within the constraints presented by different term and semester schedules and by pre-specified module learning outcomes, typical collaborative activities span between two and four weeks, and are driven by the needs of the existing curriculum – often that of the module owned by the tutor who initiates the collaborative activity. Developing online cultural literacy (and language competence) takes time, and so we need to find ways of supporting student communication at the early stages of development of cultural and linguistic literacy. The peer-evaluation activities that have predominated in CABWEB to date tend to place an emphasis on the tangible goals of those whose work is being evaluated, at the expense of the less prominent goals of the evaluators who may be practising their skills in evaluation or in English language. We can see these timing and goal differences as discontinuities between students, in response to which tutors should promote continuities – shared motivation, task comprehension, mutual understanding – in order to reduce the uncertainty and anxiety that students may be feeling.

Cool Webs and Continuities

But we have speech, to chill the angry day, And speech, to dull the rose's cruel scent ... There's a cool web of language winds us in, Retreat from too much joy or too much fear. ('The Cool Web', Robert Graves)

On CABWEB, tutors are generally committed and pragmatic, willing to adopt flexible strategies to maximise the educational and social benefits of online international student collaboration. About 83% of students who filled in the post-collaborative questionnaire believe that collaboration was beneficial for them, but there are also indications from questionnaires, focus groups and discussion forums that it can be a stressful experience. In this section, we use the idea of a 'cool web' of language as a means of retreating from 'too much joy' associated with unreal expectation and 'too much fear' relating to the anxieties experienced in online communication, particularly by non-native speakers.

Reduction of Anxiety in Initial Interaction

Manifestations of different levels of anxiety and uncertainty experienced by participants of the communication process, as well as attempts to reduce them, were found at all stages of collaboration, but mainly in initial interaction. On the basis of earlier findings, advice was offered to tutors on supporting students in adopting active and interactive strategies. We encouraged tutors to share with student groups information about the modules and programmes of other groups, but this was not always done, and even where information was available, it was not always recognised by the students engaged in the collaborative activity, as this example shows:

I wonder what you are studying, because at first we all thought that you also were making some movies and that we would get to see them too. (Polish student, discussion forum)

Many students were quite good at using an interactive strategy, and thus promoting informal, friendly discussion in their threads, as these examples show:

Hi ... I am studying technology of food at TEI [Technological Education Institution]. This is my first year too in this subject. (Greek student, discussion forum)

How are you? Thank you for your reply, your English is nearly perfect. Do you enjoy Food Technology? That sounds like an interesting subject. Are you a good cook? I can't cook at all, apart from Toast! (British student, discussion forum)

I do not hope to go into teaching, but get a job at a big food production industry. (Greek student, discussion forum)

At the same time, there were students (mainly among non-native speakers of English), who chose a passive strategy with minimal interaction when it was possible. For example, in the peer-evaluation of projects done by Polish students (where Dutch and British students played the role of evaluators), introductory messages and links to the projects were posted by the Polish facilitator, who was hoping that it helped the Polish students to find their threads easily and start discussion simultaneously. Though British and Dutch students posted their evaluations straight away, some Polish students restricted their participation to one introductory posting, and a few of them never appeared on the discussion forum, although the logs showed that they had been reading comments posted about their projects.

In the majority of cases, passivity (apparent from small number of postings, unwillingness or reluctance to continue discussion, and so on) could be explained by low motivation (students already got their marks for the projects and discussion wasn't assessed) and/or timing restrictions (inappropriate time of the collaboration, closeness of examinations or deadlines, and so on). But sometimes, as the focus groups demonstrated, it was a reaction to unexpected or unpredictable behaviour of peers, or lack of confidence in their language skills and their ability to express themselves properly.

Social Interaction

As part of an interactive strategy guided by Salmon's five-stage model (Salmon, 2000), some tutors on CABWEB encouraged students to socialise prior to the collaborative activity. Corner cafes, forums for non-formal, off-topic interaction among the collaborating students, were standard. Though highlighted by some tutors, these social places were, however, rarely active. Questionnaire responses and focus groups from different cohorts indicated some reasons for students' reluctance to use these areas:

had no time for socialising. (British student, questionnaire)

there was no indication that the [foreign] students wanted to discuss other topics. (British student, focus group)

wasn't sure about my English. (Spanish student, questionnaire)

The attempt of one of the tutors to set up a 'humour' thread in the Corner Café and encourage students to share examples of their national or international jokes resulted in a quite active, but monocultural, native English speakers' discussion. It was obvious that the level of some jokes, with their subtle language play, was too high for non-native speakers. Using jokes is regarded as meta-communicating or meta-messaging (Tannen, 1993). As Smith & Bond (1998) indicated, in the case of different cultural backgrounds and language skills, communicators become 'mindful', and must decide how to respond. They may withdraw from the interaction (as happened in this case), adopt a new routine, or process the impasse by explicitly confronting the difficulty.

The collaborative activities usually lasted for three to four weeks and students with busy lives and other competing deadlines did not always find time to socialise or to attempt it at the same time as the other students. In the peer-evaluation activities, one group of students were focussing on their assignment, while students in the other group of non-native speakers may have been reluctant to discuss other topics due to their limited language skills.

At the same time, there were varying degrees of social interaction within the task-focussed discussions, as shown in this thread from a discussion forum between a Turkish student studying in Germany and a British student:

I'm studying information design in the first semester in Stuttgart, Germany. It's my second studies. Before I studied journalism at University Istanbul in Turkey. My hobbies are reading, playing guitar and singing, cooking and sports. I also have a web site, which you can find here... There you can find kurdish song texts and guitar accords. (Turkish/German student, discussion forum)

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thank you for your reply and comments. After looking at other students websites I do agree that my backgrounds are quite intensive which make it look a bit unprofessional, but this is the first time I have created one! I have looked at your website, and even though i do not understand it as it is in German! it does look very interesting and professional with a lot of information, I am sure it would have taken you a long time to create! I'll tell you more about myself shall I. Im 19 years old and ... live in a small village called <name removed> in North Wales. (British student, discussion forum)

This thread shows social interaction but also reveals the challenges of communication across three languages and cultures.

Differing Expectations

On CABWEB, students experienced discontinuities – misunderstandings that may relate to limitations of the medium or to cultural or subject-area differences – and in attempting to achieve continuity displayed a variety of responses and behaviours. Those students seeking feedback through peer evaluation are subjecting their work to a critique that they may find difficult to accept, particularly if expressed in a style that is culturally dissimilar to what they expect. For example, when a group of Spanish students evaluated multimedia projects of students from the United Kingdom, they formed their attitudes on the basis of personal involvement and level of enjoyment whereas the British students were expecting a critique that would enable improvement of their projects, as the following examples demonstrate:

your proyect ... isn t very interesting like it should be. To our seem it, isn t a proyect to everybody, only for a specific group of people, who likes that kind of film, and of course, is neccessary that they have watched the film. In our country, we don t know WITHNAIL AND I, perphaps for this it isn t interesting for us. (Spanish student, discussion forum)

Finally, we want give you CONGRATULATIONNNN!!! because the proyect its veryyyyyy ok and entertaining. We hope you can finish it. Spanish student, discussion forum)

The project will have more interest if you were telling anecdotes or events of the filming. (Spanish student, discussion forum)

Such a gap in expectations can be stressful, particularly for those whose work is being evaluated.

In another peer-evaluation activity, where multimedia presentations of British students from a department of computer science were evaluated by Australian students of design, the British students were very frustrated and even shocked when they got very critical, mostly negative feedback from Australian peers. Their disquiet was evident in their postings in the reflective thread and in the subsequent focus group. As the Australian tutor explained to British students later in a discussion forum, this type of feedback is typical among student designers, the giving and receiving of feedback being important skills for their professional survival.

Among the student groups active on CABWEB to date, there is a range of proficiency in using information and communication technology (ICT), and we have had collaborations between student groups with very different levels of expertise. Spanish psychology students exhibited anxiety about their low ICT skills that manifested as problems with access and difficulties with posting. These students tended to produce many short postings, sometimes with the same content (just to be sure that their postings would appear on the discussion board).

The cultural discontinuities in all of these examples were between disciplines as well as between national cultural backgrounds. Strategies to deal with them included providing better information about what each group was doing and why, and the use of meta-communication to enhance understanding in a responsive manner.

Automated Translation Tools

In peer-evaluation activities, those evaluators whose goal is improvement of their language skills (usually English in our experience on CABWEB) have the benefit of communicating with the native speakers whose work is being evaluated. On the other hand, they experience anxiety in

expressing themselves in a second language and communicating with people from a different culture who may be less aware of the differences since they are communicating in their native language. Anxiety about their limited proficiency in English encouraged some Spanish students to use automated translation tools in an attempt to make themselves understood. Unfortunately this at times resulted in text that was hardly understandable to either reader or poster:

The work this constructed well, it (he,she) possesses a very interesting introduction, the only problem that we observe is that lacks an access towards behind, or at least is not observed, that it(he,she) would facilitate the walk along the feasible one. (Spanish student, discussion forum)

In this case, the use of the tool as a continuity to bridge the discontinuity presented by lack of language skills was unsuccessful, but for a student whose English language skills were sufficient for them to build on the automated results to produce an understandable response, the tool might, perhaps, have provided a genuine continuity.

By contrast, in a collaboration between British and Greek students, some Greek students who had no previous experience of communication in English refused to use the online translation tools provided by tutor, and consulted paper-based dictionaries, as well as using the expertise of their fellow students with better English-language skills. The same strategy was adopted by some German students from a non-German cultural background in another collaborative activity:

Hi ... sorry for responding late, because I need somebody who helps me translate into English. (German student, discussion forum)

British students in this collaboration made use of automated translation tools to help their Greek partners with understanding of their postings. According to a native Greek speaker, this is an example of a reasonably good translation:

I have decided that my website will be an introduction to comedy in the UK. It has been brought to my attention that some of the greek students are concerned about their spellings ... there is no need to worry as all the messages are easy to understand. A draft version of the website should be up and running on friday, I will post a message as soon as I have uploaded it.

Εχω αποφασίσει ότι ο ιστοχώρος μου θα είναι μια εισαγωγή στην κωμωδία στο UK. Εχει υποπέσει στην αντίληψή μου ότι μερικοί από τους ελληνικούς σπουδαστές δεν ανησυχούν για τις ορθογραφίες τους... εκεί είναι καμία ανάγκη να ανησυχήσουν δεδομένου ότι όλα τα μηνύματα είναι εύκολο να καταλαβευτούν. Μια έκδοση σχεδίων του ιστοχώρου πρέπει να είναι σε υπηρεσία την Παρασκευή, θα τοποθετήσω ένα μήνυμα μόλις το φορτώσω.

I used http://translation.langenberg.com/ to translate the message if that's more convinient?' (British student, discussion forum)

There were examples of using online translation tools in social forums to promote discussion. The following extract from a discussion thread has confirmed that online translators should be used only if students have previous knowledge of the language and can understand the meaning of the message:

Hallo dort Völker!! Meine Namen <name> und i'm wirklich glücklich an der Minute weil i'm mit allen Sie sprechend große Leute in Polen. Mein Liebling Platz zum zu sein ist Polen, sind die Leute dort um mir wirklich nett und gekümmert, als ich klein war. (British student 1, discussion forum)

AT FIRST: Please, don't use the technical translater again. It doesn't works. It sounds sooooooo bad!!!!! That is not a german which I could understand. And I'm german!!!!! AT SECOND: What does it mean, friendly people in Poland and that they cared for you when you was a little child??? That is the translation. (British student 2, discussion forum)

Tutor Strategies

Tutors adopted their own strategies for facilitating the peer-evaluation interaction. Criteria for evaluation provided by tutors acted as a scaffold – a useful guide to the structure and content of the interaction between the two groups, as long as the criteria were perceived as relevant by evaluators and those whose work was being evaluated. Another tutor who wished to help the communication between native and non-native speakers provided a very structured response sheet where the non-native speakers had a translation of the criteria and Likert Scale responses (see Figure 1). Unfortunately, the outcome was that only the completed tick sheets were exchanged and there was little or no interaction between students.

1.1	Strongly Agree Zgadzam się w 100%	Agree Zgadzam się, ale	Disagree Raczej slę nie zgadzam ©	Strongly Disagree Nie zgadzam się w 100%
A.I found that the author made a good use of sound. Uważam, że autor zrobił dobry użytek z dźwięku.				

Figure 1. Example of question from Structured Response Sheet for Polish students.

Emoticons

While native English speakers and students whose language was at a fluent and advanced level occasionally illustrated their emotions with the help of emoticons, students with a low level of English skills used emoticons abundantly (there were examples of messages containing more than 20 of them). These functioned to support their positive as well as negative emotions and to express their attitude to the project they evaluated – possibly being used at times to soften negative statements; for example:

"In general we think that it's not very good, because is a little simple 🙂, there not much sound and the most things can t seen. We encourage you, for continious your work and improve it.



Sincerely from Spain. (Spanish student, discussion posting)

The Dutch tutor whose students were collaborating with this particular Spanish group explained that the Dutch (information technology [IT]) students did not use emoticons as they regarded them as being rather childish.

Constructive Conceptual Conflict

Mydlarski (1998) has highlighted the potential of constructive conflict in a second language setting for highly productive learning. Here is an example of a Polish student with significant English language skills responding to feedback on project work:

As for the character in my movie, it was probably the only thing that came out just like I wanted it to be. I think you have a point that it may not fit in. The title however is strictly connected to the character's appearance. I'll try to explain. The word 'cieniol' is a Polish slang. It means someone who is very weak at something. It is not offensive but rather considered funny.

Moreover the word is very similar in sound and spelling to the Polish word 'cienki' (and at the same time is derived directly from this word), which means 'thin' (a line may be thin) but may also be an adjective of similar meaning to 'cieniol'. Hence the duality of the title. On one hand it means that the character is really very thin (it's made of thin lines) and that he's weak at something (we don't actually know yet what).

Thanks again for writing and write more. I hope I didn't bore you to death with that explanation. (Polish student, discussion forum)

The text in normal type above indicates confident use of English by a non-native speaker to express sophisticated ideas, even though the last sentence (in italic type) reveals (unwarranted) anxiety about the posting. The use of explanation in this interaction that is situated within the student's subject-based learning is an excellent example of Mydlarski's recommendation. Moreover, the student is demonstrating the use of meta-communication to deal with the difficulty of jokes, in this case a pun, that do not easily cross boundaries of language and culture (Smith & Bond, 1998). The student was able to do this because of his own skills in language, unrelated to his course of study. Such a strategy would be beyond many of the non-native English speakers on the CABWEB portal.

Conclusions

It is clear from student and tutor responses in questionnaires and focus groups, and from analysing the content of discussions, that international student collaboration online is a worthwhile yet challenging undertaking for tutors and students alike. Our analysis of the use of the 'only connect' quotation underlined the unrealistic expectations that can be set up for Internet use in work and educational settings, when the cultural, linguistic and technical barriers that affect individuals are ignored or de-emphasised. We have used examples from student interactions on CABWEB that highlight both difficulties and opportunities. Further, they reveal the variety of strategies adopted by students and tutors, with varying degrees of success. These include ways to 'cool down' the interaction and manage associated mutual expectations. We draw the following conclusions from our work.

• We have unpicked the rhetoric of 'connection' in the context of CABWEB and explored the use of cool webs in understanding past and developing future planned collaborative activities.

The concept of connection by means of common purpose and building relationships is very powerful and if we can resist grandiose claims, we can realise some of this power in appropriate if sometimes limited ways. It is a challenge for tutors to establish authentic and feasible activities that operate within the Zone of Proximal Development for students with different prior experiences, studying different subjects and probably with different languages and cultural backgrounds. It is equally a challenge for students who engage in these activities. CABWEB can help tutors meet this challenge by means of resources and the provision of a place to discuss student collaboration (HELP network), but their success may be limited by other factors such as tutors' own knowledge and availability.

• There is a need to support early experiences of intercultural interaction.

Intercultural communication between students from different countries, institutions, and possibly different subject disciplines may be seen as a kind of conflict situation, particularly during the first encounter. It is often difficult for inexperienced intercultural communicators to overcome their anxiety and to engage in open dialogue. Even if they try, they may not succeed and their prior expectation of a completely new educational and social experience ends in disappointment. Retreat strategies might be visible during collaborative activity, indicated by short postings or shallow interaction, and evident in predominantly negative responses in reflective threads. Even when there is no evidence of retreat during the collaboration, problems may become apparent later, in focus groups or in questionnaire responses.

It is important to expose students to constant experience of intercultural communication in various forms and with different tasks involved. By encouraging realistic expectations for students, and supporting them in appropriate ways, we may be able to minimise anxiety, whilst students and tutors come to accept that some stress may be a natural element of the challenge of learning.

• Differences in culture can be national, institutional and discipline based.

We anticipated that differences in national culture would impact on the interaction and collaboration between students. What we did not expect was the cultural diversity within each student group that increased the richness of the collaboration and of its analysis. The examples we found of students within a group having broader cultural experience and influences led to enriched communication. Cultural differences existed between student groups relating to the 'culture' of their university, and of the subject of study. These various cultural differences assumed greater or lesser significance in different circumstances.

• Longer term collaborations may address some of the limitations of the short-term collaborations that are common on CABWEB.

To address some of the limitations of current collaborations, tutors can develop activities that are an integrated part of an internationalised curriculum, instead of bolted on to the current curriculum, as tends to be the case at present. This may be associated with a longer term relationship between institutions, possibly arising from or reinforced by personal connections between tutors on the HELP network.

Kalantzis & Cope (2004) recommend as an ultimate goal a 'transformative' curriculum that tries 'to cater more consciously, directly and systematically to difference amongst learners', in order to improve equity outcomes (p. 51). This is an ambitious goal but in working towards it we may be able to foster culturally inclusive, demanding, longer term and truly collaborative international activities for students that require a change in the curriculum. These truly shared activities may arise from tutors' personal contacts or through strategic institutional partnerships (e.g. through the European Union [EU] Erasmus programme), or through both of these. They have the potential to create more connected, and less cool, webs of interaction between students and tutors.

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