The identities of both lecturers and students in Universities are being challenged as their roles in the teaching and learning process are changing. This paper examines how Internet Based Learning can provide for best practice within three principles of learning: fostering a critical and reflective approach to learning, encouraging independent and collaborative learning and motivating students. It reports on the reflections of both students and lecturer in an IBL credit subject at La Trobe University. It concludes that there is a degree of conflict between the pedagogical and practical issues in IBL.

**Keywords:** Internet Based Learning, English as a Second Language, Credit subjects
**Introduction**

Over the past two decades the trajectories of Australian universities have altered. The student body, the teaching staff and the institutions themselves have undergone significant change. This change, in part, is due to the emergence of constructivist theories which view knowledge as a social construct, developed via an ongoing “conversation” in which all the community of learners participate and each reaches her unique, individual understanding of a particular phenomenon. Sherry (2000, p. 2) argues “Learning is inherently a social, dialogical process in which learners benefit most from being part of knowledge-building communities”. And learning, from the constructivist viewpoint, has taken place when there is a change in the individual.

Constructivism has challenged the identity of teachers, as it has contributed to their role being changed from that of the keeper and disseminator of knowledge to that of facilitator, manager and collaborator (Tilson et al. 2001). Students, as learners, have also been challenged by this postmodern paradigm as they are no longer the Dickensian “empty vessels”, but must contribute actively in their learning, through participation, reflection and communication. Many tertiary course designs, as a result of this paradigmatic shift, now employ methodologies such as Situated Learning or Problem-Based Learning as best practice. Moreover, many changes in both teaching and learning are increasingly being facilitated and moderated through technology, in particular the Internet. The use of such a medium is a further challenge to the traditional identity of tertiary teachers.

In fact, the dynamic change of terminology for computer-based learning reflects both the change in our understanding of what constitutes good teaching and learning and also our increasing sophistication in the use of such technology. In the early days it was referred to as Computer Assisted Learning (CAL) or Computer-Aided Instruction (CAI) (Sherry 2000). More recently, terms such as Internet Based Learning (IBL) (Curtin University 1999), elearning (Farrington, & Bronack 2001), online learning (Tilson et al. 2001), internet education (Hara & Kling 2000), and Computer Supported Collaborative Learning (CSCL) (Sherry 2000) have been used. Further to this, if computer based learning is to be effective it should employ Computer-Mediated Communications (CMC) (Curtin University 1999). Hence, the epistemology
of computer based learning mirrors that of good teaching and learning practice – a shift away from a passive to an active environment.

This paper then will, through a case study of a university credit subject, English as a Second Language 2, identify and discuss the strengths and weaknesses of IBL for tertiary learners in terms of the principles of best practice in 21st century tertiary education. It will identify how this technology can contribute and smooth the path for our changing identities as teachers, as we reconceptualise our role in teaching. It will first describe the online subject, both content and the technological environment employed, and then consider its strengths and weaknesses in terms of just three principles of good teaching practice, informed by a constructivist view of knowledge. These principles are fostering a critical and reflective approach to learning, encouraging independent and collaborative learning and motivating students. It will finally examine the problems faced by students and by teachers in participating in IBL, as experienced during semester 2, 2001. (This paper will generally use the term Internet Based Learning (IBL) when referring to teaching and learning via the web.)

**English As a Second Language 2 – subject content**

English as a Second Language 2 (ESL 2), is a 20-credit point subject offered by the Language and Academic Skills Unit, through the Institute for Education at Bundoora Campus of La Trobe University. It is offered to students from all faculties and can be credited from second year through to a Master’s course work subject. It was first offered as a face-to-face subject in semester 2, 2000 and has been offered as IBL in semester 2, 2001. The general objectives of the subject taken from the student handbook are to:

- Enhance the critical reading and writing skills of students for whom English is a second language.
- Apply a critical framework to the use of English in global communication
- Explore the range of issues relevant to the role of English as a tool of global communication
• Deepen awareness of global issues in terms of their applicability to students’ intended professions, through the study of internationally relevant texts

• Identify and apply linguistic features of good models of writing.

ESL 2 has a number of assumptions that underlie the content and framework of the subject. These are presented to the students in the following form in order to encourage reflection on the assumptions they bring to their learning:

• Languages, especially English, play a role in shaping global culture.

• Understanding, applying and creating English texts (written, spoken, and electronic communications) in the context of global communication, requires not only understanding of the words and sentence structures used, but also: familiarity with relevant concepts, identification of, and critical reflection on the values, assumptions and (power) relations which the language in the text expresses, particularly in relation to global culture.

• Different approaches to teaching and learning reflect different educational purposes, reflecting the values of the culture. In the context of the continuing globalisation of education, it is arguable that students should not have to adapt their English to expressing English ways of thinking, valuing and learning (e.g. through critical thinking, direct expression, English forms of logic). Rather, the style of teaching, learning and assessment should reflect multicultural approaches. On the other hand, students who succeed in adapting their learning approaches to another cultural set of values and ways of thinking, tend to be among the highest achievers in our education system. This suggests that using two learning approaches or multicultural learning approaches, provides enriched learning and communication skills. Therefore, an assumption which underpins this subject is that the approaches to learning which students bring from their mother cultures are of great value, but there is also great value in developing the approaches to learning which are a part of other learning cultures, such as that in Australia.
• The constructions in this subject are informed by concern about equity, in terms of the role of English in shaping values, power relations and access to opportunities

To achieve the objectives and in line with the assumptions outlined above, the content of the subject has two sections. The first analyses the literature for the theoretical framework of English as a tool of empowerment, English as contributing to cross-cultural communication and English and cultural identity and the second examines a range of authentic texts in the light of the theoretical framework. In all texts studied, there is not only conceptual analysis but linguistic analysis as well.

**English As a Second Language 2 – technological learning environment**

The IBL ESL 2 is delivered through WEBCT. This environment is specifically designed for tertiary online learning and has a number of features which promote good practice ([http://www.webct.com](http://www.webct.com)). It presents a homepage to students from which they access the tool pages. The most important tool pages for ESL 2 are: Subject Information (handbook information), Assessment (details of assessment and tasks), Study Material (lecture notes), Communications (email and bulletin board) and Student Tools and Utilities (drop box for assignments, calendar). (See Figure 1)
In addition to offering students a structured learning environment, WEBCT also provides the teacher a comprehensive course management tool. It allows for tracking of all students' participation in the subject, by, for example, counting the number of hits a student has on each page, recording the number of entries they have contributed to the bulletin board and allowing for all assignments to be submitted via a Drop Box. Thus, WEBCT is an environment accessed via the Internet specifically designed to provide a range of tools for tertiary learning.
Good Teaching Practice

So how does this web learning environment provide for quality teaching and learning? This section will look at just three areas in which good teaching can be evaluated: fostering a critical and reflective approach to learning, providing for independent and collaborative learning and stimulating student motivation to learn.

A Critical/Reflective Approach To Learning

Farrington and Bronack (2001 p. 3) question the ability of IBL to foster critical thinking – a skill central to deep learning. “Can information technology replicate the “in your face” and “in your mind” experiences that foster critical thinking and sensitivity to the audience that we provide, person-to-person, in the walled classroom?” This paper argues that there are a number of features of IBL which do allow for critical analysis and that students themselves in ESL 2, report increased reflection and a deep approach to learning.

The design of ESL 2 is central to fostering this critical and reflective approach of the students. The course is provided in twelve blocks, which are each structured in similar ways to avoid confusion. For example, each session has the following outline: objectives, preview of last session, introduction, lecture notes, discussion questions (integrated into lecture notes), quiz or self test, review, tasks for next session, references. Students, as they are presented with these on screen in each session, are clear about the objectives of the session and how these fit with the overall subject goals. This allows them to reflect on and relate the parts of the subject to the whole: an essential element in a critical approach.

Further to this, the interactive component of ESL 2 promotes critical thinking. Integral to the lecture notes online is the bulletin board – a discussion list. Students at a particular point in the lectures are asked to click onto the bulletin board and respond to a prompt that is provided in the lecture notes and repeated in that session’s forum on the bulletin board. They are asked to post their response to the prompt and also to respond to another student’s comments. Although Donnan (2001) has identified “a lack of depth” in student postings as a problem for IBL, Tilson et.al (2001) note that research has shown that students participate more in online than in classroom
discussions and are more willing to contribute their personal reflections. Tilson et al. also argue that online discussions are more fruitful as the students have time to think about their response. Thus, the extensive use of the bulletin board in ESL 2 is another factor which may encourage students to take a critical approach in their learning.

Student self-reports also suggest that learning via WEBCT allows them time for such critical reflection. Anecdotally, learners have commented on the depth of the discussions online, compared with group discussions in tutorials. They see this as a result of both being able to read other students postings at their leisure and having the time to compose their response online. Student A noted on the bulletin board, “I think doing this course online is more effective in terms of improving my language skills. Discussions in class tend to be bit superficial”. Student B noted, “About language, I believe that I improved myself in writing and discussion fields. The question discussion of each weekly session pushed me into writing more. As for discussions, I had to discuss more on line, than I would have even when I attend the face to face classroom situations”.

Hence, IBL can foster a critical and reflective approach to learning through careful course design and through the use of the bulletin board.

**Independent and collaborative learning**

Although there is continuing discussion about the isolation of online learning for students, “cyberia” (Donnan, 2001, Hara & Kling, 2000), there is evidence to suggest that this need not be a factor and that IBL can simultaneously encourage independent and collaborative learning (Tilson et al. 2001, Sherry 2000). One basic factor which encourages independent learning is access to the learning environment. Students can logon to the web at any time and thus have control over the time and space in which their learning is activated. Other factors are that students learn at their own rate, can focus on what they find the most difficult and are not distracted by the irrelevant happenings in a face-to-face learning context (Tilson et al. 2001).
Students taking ESL 2 were aware that the subject would be delivered via the IBL mode and perhaps this indicates that they were comfortable with an independent learning style. However, elements of the subject design encourage students to be responsible for their own learning. IBL allows for hyperlinks to other internet sites to extend the community of knowledge, to expose students to texts, both spoken and written and thus allow them to readily explore beyond the walls of the classroom.

A further factor that promotes independent learning is that IBL focuses on learning rather than teaching. To be successful, online design must conceptualise the learning process and how students may access and interpret the material. Hence the organisation of the site is critical in allowing students to move comfortably through the subject. To this end, ESL 2 has a structured format, but students can move between one section and the next through a network of internal links, which allows them to make decisions about their own learning path within the subject.

IBL becomes collaborative through online discussions. Sherry (2000 p. 7) explains Pea’s (1993) theory of conversation, “. …people use conversational space to construct their common ground of experiences, meanings and understanding collaboratively”. She goes on to further explain; “Expertise is developed dynamically through continuing participation in the community’s discourse, rather than simply through the individual’s possession of a knowledge base and a set of problem-solving skills”. In this way, IBL is not Computer Aided Instruction but Computer Supported Collaborative Learning (Sherry 2000).

ESL 2, through the WEBCT tools, has provided for such collaborative learning through “conversational space” in two main environments, the bulletin board and the built-in private email. As discussed previously, students contribute to prompts on the bulletin board each session and also respond to others’ postings. The lecturer synthesises these contributions weekly and provides feedback to the whole class – both in terms of content and language. In addition, she is able to email individual students with comments when necessary. WEBCT also allows the facilitator to set up groups on the bulletin board. ESL 2 has used this in establishing heterogeneous groups for particular discussion purposes. Hence, in this web environment all stakeholders are working together to construct the learning that is taking place. As Sherry (2000 p. 15) writes. “Online conversations are goal related, blending the
goals of the course with the intentional goals of the students in constructing knowledge and solving problems collaboratively”.

**Motivation**

Finally, a learning context that motivates is central to achieving high learning outcomes for students. Initially, IBL per se is attractive to particular students, as it is a new learning experience for them and they are keen to experiment with this environment. However, a number of other factors are central to motivating students learning. These include among others: contact between the lecturer and students, prompt feedback to students on their learning, creating a learning environment that is comfortable and encouraging for students and valuing student input in the learning process (Chickering & Gamson 1997, Codde 1999, Chizmar & Walbert 1999, Sherry 2000).

In IBL, it is easy for the student to see the contact between the lecturer and herself as one-to-one. In ESL 2, it is the practice of the lecturer to respond to individual students, via email on a weekly basis. This response may be feedback on the student’s posting to the bulletin board either in terms of the content or the linguistic features of the students writing, feedback about a recently assessed piece of work, follow up on the access records of the student or a reply to an email sent by that student about some aspect of the subject. In addition, the lecturer uses the tips facility provided in WEBCT to communicate with the students and the message on it is changed weekly. So, when students logon they automatically get the tip, which may be a message of encouragement, a reminder about submissions etc. Thus, students have significant one-to-one contact with the lecturer.

Prompt feedback is another feature of IBL. Students get feedback from the lecturer not only on assessable pieces of work, but also on their contributions to the bulletin board and this occurs weekly. In addition, students are also comfortable using the email tool to contact the lecturer about any issues they have with regard the subject and whilst feedback on the bulletin board is weekly, the emails are checked at least daily and often two or three times a day and a reply sent immediately. So, students have frequent and timely feedback on both the academic nature of their learning and
other issues which arise in the course of the subject. This acts to maintain their enthusiasm and interest in the learning process.

The interactivity of WEBCT contributes to the creation of a comfortable learning environment for students. The bulletin board helps develop cohesion within the group, as they respond to each other’s postings. In fact, it is probably one of the few tertiary learning environments where students know the names of their co-learners! The prompts to which students are asked to respond have been written to ensure that their previous experience is valued and the group as a whole can co-construct meaning via dialogue with each other. Thus, students are engaged in a real-life collaborative construction of an area of knowledge. The use of email also supports their being comfortable in the subject, as they are able to access the lecturer at any time to ask for clarification, check requirements etc.

Hence, there are a number of ways in which IBL can contribute to student motivation. Perhaps the most important factor is that their individual voices are being heard in their learning environment and both co-learners and the lecturer are responding to those voices. For many students, this is an empowering experience!

Constraints of IBL

However, there are constraints in IBL and these are mostly of a practical rather than pedagogical nature. This section of the paper will examine some of the difficulties faced by the lecturer and students participating in the ESL 2 IBL subject in semester 2, 2001.

For the students, the initial difficulties arose, as in Hara and Kling’s study (2000), due to technical problems. In this case, students were unfamiliar with WEBCT and had no computer lab based instruction on how to use it, but were reliant on “playing” with it, the built-in help files for students and contacting the lecturer via email to ask for clarification/instructions etc. The process of familiarisation took students, on average, about a week, although there were still some hitches over the first five weeks. This did lead to some frustration on behalf of the students. Here is an extract from an email received from Student C who was attempting to complete an assessable task, writing a journal entry. He had to download it and save it onto disc before he began
writing, but unfortunately had not read the instructions about this carefully enough! “Hi Jennie. I'm a little bit upset right now. I just wrote my Journal 1 and as I tried to save it, it only saved the original document … I sat for over an hour and thought we managed to save the file, but we didn’t. So we lost all information and had to re-do it. That's too bad, because the second one is not as good as the first one...” A student from China was severely embarrassed as she misquoted the population of China in a bulletin board discussion and was confronted with her error, in an extremely polite way, by a Brazilian student hyperlinking a population graph from a website to his response to her posting! When such errors have been sent on the internet, students cannot recall them as in face-to-face classroom discussions!

Related to technical difficulties is students’ confusion in the bulletin board when there are many simultaneous forums and within each forum, many threads. Donnan (2001) also reports such confusion. If the students post in the wrong forum or the wrong thread, their contributions to the discussion will be lost. This issue has become less of a problem as students become accustomed to the forums.

A major constraint that students have indicated is the time taken to study online in ESL 2. One posting in the anonymous subject evaluation forum reads, “Never was so much effort put in a subject in so many hours for so few credit points” (Student D.) A snapshot of students’ access and use of the bulletin board at the end of session four revealed the following staggering statistics.
Table 1: Snapshot of student use of ESL 2 site after session 4.

Students also report that it takes time to respond to the prompts, as apart from reading and reflecting on other postings, they sometimes find it difficult to compose exactly what they want to say. Although, they also report that this is having a positive effect on their English language written skills. (These statistics have not taken account of the email correspondence which is also quite significant.)

As you can imagine, such an active learning environment has its effects on the lecturer! A weekly log of time spent by the lecturer on ESL 2 shows on average 13-16 hours were spent and this of course does not cover preparation as the course has been all pre-designed and uploaded onto the site. The time is spent on replying to emails, reading all the postings (a total of 608 in the first four weeks) synthesising them and responding both to the group in a feedback forum and individually to students via their emails. Donnan (2001) reports that some tutors at the University of Maryland are paid an additional loading to work online because of the extra time involved.

However, there have been many positive responses to this IBL subject. Both students and lecturer report on the value of the interaction between them which has also been noted in studies on IBL (Chizmar & Walbert. 1999). Students feel they are
able to move on confidently in their learning as they receive individualised, frequent and timely feedback from the lecturer. The lecturer feels she has a better knowledge of students learning motivations and skills because she is able to read their postings and communicate with them on a regular basis. Students value being able to be flexible with regard to accessing their learning, although they are required to logon at least twice a week. (In fact, records indicate most students logon much more frequently than this.) Overall, IBL has been an exciting learning experience for both lecturer and learners. However, future development of the subject will take into account the evaluations and reports by students as well as the reflections of the lecturer.

**Conclusion**

As teachers, we are continually faced with the challenge of providing a learning environment which can lead to enhanced outcomes for all our students. Overall, IBL can fulfil the requirements of good teaching practice in terms of fostering a critical and reflective approach to learning, providing for independent and collaborative learning and stimulating student’s motivation to learn. However, there are two essential requirements for this to occur. The first pertains to subject design and second to the essential element of interactivity. Content of the subject has to be arranged in a logical and coherent way so students can navigate the site easily; they can only contribute to decisions about their own learning path in the subject, if this is the case. Secondly, online conversations are essential to the learning process; through these students feel connected, valued and are able to construct meaning through shared dialogue. Our changing identities as teachers are supported via IBL. In designing online subjects within the framework above, we act as facilitators, managers and join with our students as collaborators in learning; we are no longer keepers and disseminators of knowledge.

However, the practical constraints of IBL must also be taken into account, in particular the amount of time needed for both learners and lecturers. If students are to achieve high outcomes in their learning, they must perceive the learning environment in a positive way. Thus, when there is a perception of the workload
being too high, students will not achieve such outcomes. So this factor must be addressed in IBL.

IBL can address our changing identities as teachers and learners. As Riel and Fulton (2001 p. 1) argue, “Technology supports and expands the sociocultural links that help give us intellectual identity. It also provides the new “power tools” for learning that enable students to develop the interpersonal and intellectual skills necessary to construct shared understanding of their world”.

References

Chickering, A.W. & Gamson , Z. F. 1997 *Seven Principles for Good Practice in Undergraduate Education* [Online], Available: [http://www.hcc.hawaii.edu/intranet/commi.../FacDevCom/guidebk/teachtip/7princip.htm](http://www.hcc.hawaii.edu/intranet/commi.../FacDevCom/guidebk/teachtip/7princip.htm) [2001, April 30]


Codde, J. 1999 *Applying the Seven Principles for Good Practice in Undergraduate Education* [Online], Available: [http://www.msu.edu/user/coddejos/seven.htm](http://www.msu.edu/user/coddejos/seven.htm) [2001, April 30]


Donnan, P. 2001 ‘Promoting and managing interaction within a WEBCT environment’ *WEBCT Conference Proceedings, Adelaide*


Student A (2001, Aug. 12) Evaluation so far EDU40ESL.webct

Student B (2001, Aug. 10) Evaluation so far EDU40ESL.webct

Student C (2001, July 26) Journal 1 EDU40ESL.webct

