Student Learning Support
in an Online Learning Environment

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Abstract
Many universities face the challenge of providing learning support for an increasing diverse cohort of students. The Centre for Educational Development and Support has the specific role of attending to the development of study skill needs of students enrolled at Victoria University. It's specific aim is to facilitate student acquisition of skills necessary for the successful completion of tasks and the development of tertiary literacy skills in general. There is a move at universities in Australia towards enlisting the online education environment as an extension to study support activities, which brings with a new set of challenges for those supporting student learning. In designing online support site in question it is first necessary to develop an overview of the different models of support and modes of delivery currently operating at our University. We develop a model of student learning support on the basis of our experience at VU and subsequently, explore this model in terms of the collaboration, conversations and interactions between the SLS person, student and teacher.

Keywords
Student learning support, Conversational models, Learning partnerships, Shared experience, Multiple conversations, Online learning environment, Non-traditional students

Introduction
While it is understood that it is a "teacher's task to construct the conditions of the learner's interaction such that their experience enables them to learn -" [Laurillard, 1994, p.19] additional support may be required in order that students come to an understanding of both the material and the conditions being constructed - this then, would be the role of student learning support (SLS).

The impact of the online learning environment is relatively new, therefore, the issues regarding what the online environment offers education are being explored simultaneously as innovations are being adopted. This paper aims to offer an initial exploration into the issues of student learning support (SLS) in terms of the online higher education environment. We suggest that at this crucial time of rethinking in higher education in view of the pedagogical opportunities technology may afford, as pointed out by scholars such as Laurillard (1993) and Martin (1999), that it may be an opportune time to re-evaluate SLS in terms of its role and models adopted in education, and dare it be said, time to cast off the deficit model with which it's work is stigmatised.

Models of Student Learning Support

As a result of higher education institutions embracing mass education and refiguring their educational objectives to include lifelong learning, there is a necessary move towards inclusive educational practices that take into account the increasing number of non traditional students [Taylor, June, 1999 #57]. The student population at Victoria University (VU) can be considered of educational interest to the broad academic community as it is represented by a relatively high percentage of non traditional students, that is, students from low socio-economic backgrounds, culturally varied, mature-aged students and there is an strong indication that many students are first generation university students (though at the time of writing this paper there were no statistics available to confirm this). In response to student needs, inclusive and equitable teaching practices are encouraged. One aspect that often plays an important role in addressing the needs of

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1 “Victoria University enrolls students from low socioeconomic status (SES) backgrounds at a greater rate than other universities. In 1996, 24% of commencing students were from low socioeconomic backgrounds compared to 15.6 % sector-wide where these groups are by definition 25% of the population. The University enrolls approximately twice the number of low SES students to high SES students. One quarter of low socioeconomic background mature aged students and 19% of all low socioeconomic status students are from non-English speaking backgrounds”. (Hutchinson, Morrigan and Mappin, 1997, p.21)

2 39% of VUT students are from a language background other than English (LBOTE), (Nexus, April 1997).
non traditional students is learning support. The dilemma posed is the effective delivery of learning support in an online environment. This paper will review some of the models of learning support in order to frame the current discussion and it will go on to discuss these models in light of the online environment. Victoria University adopts a variety of approaches to student learning support. We have used these programs to identify what we believe are important dimensions to student learning support whether we are supporting online or conventional teaching and learning.

**Basic Philosophy of Student Learning Support**

Academic support is often a complex role requiring a mixture of knowledge of the subject, language and study skills expertise. In addition, there is a people or strong pastoral element that underlies the very nature of the work. Unfortunately, there is a relative dearth of research into the area of SLS considering the active role it has played in academia over the last few decades. What does stand out is that there is a common perception that SLS is concerned with dealing with "students with problems", that SLS "solves student problems", and the idea that SLS concerns itself with students "with accents" such as international students. These assumptions misrepresent the reality of the SLS work and can even undermine the impetus for students who wish to take up such support or staff in exploiting the benefits of such support. Let us speak clearly. The work of SLS is to support all students in their attempts to pursue academic studies and is very much embedded in transition issues as well as learning needs issues. At tertiary level students are expected to wade through a mass of information, make connections, dismiss or accept arguments and then to be able to enter into the circle of academic discourse by presenting a personal comprehensive, researched, cohesive argument. "we expect them … to exhibit some point of contact with the consensus view of a subject: if they cannot agree on the substantive content, then they must be able to provide an acceptable argument for the opposing point of view." [Laurillard, 1993, p.30]. All in all, formidable expectations for any student.

**The referral process**

Identifying students requiring SLS is the first step in providing an effective study skill program. Self-referral can mean the SLS staff see highly motivated students who are actually aware of areas of gaps in their study skill repertoire rather than students who may be overwhelmed by
their perceived lack of skills and who may not actually seek or be directed to SLS. On the other hand, triggered by some crisis, such as a batch of unsatisfactory student assignments, students and/or academics attempt to identify student needs and seek out local assistance. From experience, it is not fair to assume that both parties are aware of possible skill or information gaps. Even if students and staff are aware of SLS and its role in higher education, both parties may not obtain help for reasons such as not knowing where to seek help (both on the part of teaching staff and students); teaching staff assuming that students will access SLS of their own accord or, student for their part, that their lecturers would point them in the direction of SLS if really required. Or, resulting from the deficit model, students assume SLS is for "slow students" so do not wish to be identified with such support by their peers, their lecturers or even themselves. In more recent times, students and lecturers may search the Web for suitable online tutorials and/or information related to their requirements. However, a quick scan of such sites indicates they offer limited assistance as the discussion below demonstrates.

**Basic approaches to SLS**

The SLS model we present here has five basic approaches to supporting students: one-to-one consultation (clinical model) through an "open door" policy; separate accredited subjects within existing courses; parallel classes; generic support and teaching and learning partnerships that attempt to embed the student learning support into the mainstream teaching program.

The one-to-one consultations, especially if they are ongoing, may lead to a conversational model of SLS similar to Laurillard's model of guided discovery learning (Laurillard, 1993) provided activities emerge from student and SLS conceptions of the topics. Viewed this way, individual consultations have benefits for both students and SLS staff. However, in the context of VU, there are limitations to relying heavily on a one-to-one approach. Firstly, a large number of students who seek assistance from seven full time staff. Secondly, there maybe no direct involvement of the subject lecturer. Thirdly, students often want the SLS to solve specific problems rather than identify needs and work on study skill development. The consultation may be reduced to a one-to-one form of the transmission model of teaching.

Separate accredited subjects are compulsory or elective subjects within a degree program, which are either taught by SLS or faculty staff. The
difficulty with separate accredited subjects is that both staff and students may see them as optional extras to the course and/or subjects that only the "slow" students attend. Consequently, if the subjects are elective, many students who would benefit may not actually attend them.

Parallel subjects are often designed and developed in response to a perceived general need or in response to a specific request by the course lecturers. These subjects often run parallel to (for a short time or for the full length of the academic subject) the academic subject they are intended to support. The difficulty is that, again, students often see their participation in these parallel subjects as extra work. Consequently, while highly motivated students may attend SLS other students at risk may not attend or attend intermittently thereby not gaining full benefit of a skill enhancement program and often disrupting the scaffolding process which is of pivotal importance in such programs.

Under teaching and learning partnerships, we group mentor programs, SLS classes that are integrated into the teaching of the subject and finally team teaching where the SLS staff and academic staff teach the subject together for a specific period of time.

Generic support is also offered in the form of workshops, summer and winter schools, fliers and general study guides. These respond to a general need to upgrade aspects of academic skills and are not linked to any subject or course in particular. They offer the opportunity for students to explore the skill development process in itself before interpreting the applications of these skills in terms of their discipline focus.

There are four approaches to SLS work at VU, here we present three: firstly, the student approaches the SLS staff while the course lecturer is not included in the conversation, secondly, the SLS staff approach the subject lecturer thereby providing a student-SLS staff-teacher conduit; alternatively, (thirdly) the student talks to the academic teacher thereby leading to a SLS staff-student-teacher conduit. While not wishing to take away the positive results from the work that has been undertaken via these approaches, we recognise that each of these is limited. They do not allow for all the participants to evolve new conceptions of student learning. The fourth approach is more collaborative in nature and involves a "trialogue" whereby a triad is formed which includes the student(s), SLS staff and academic teacher(s).

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3 It must be recognised that individual counselling-type consultations that exclude the course lecturer may have a particularly valuable role when a strong pastoral element is required to work effectively with a student.
Role of Technology in SLS

A difficulty for support of the online student is that, technology up until now has been largely silent in much of the conversation about student learning support. This is no more the case as we both support online learning and use online technology to support student learning. There are a number of higher education initiatives that aim at using the online environment to offer student learning support (for instance, University of South Australia [http://www.unisanet.unisa.edu.au]; University of Melbourne [http://www.services.unimelb.edu.au/lsu/online.html]). The work of Hicks, Reid and George (1999) and that of Clerehan (1999) both explore the issues relating to SLS online and while they are interesting in terms of the approaches used and materials designed, they do not take into account the specific circumstances of the online student. Victoria University has also been active in trialing a number of initiatives, the one we will focus on is that geared to online students specifically.

We found that many university SLS websites mirror the approaches used for face-to-face SLS and as such reflect the same concerns. There are individual consultations offered online, though, as our own experience of these demonstrate, these often prove to be quite problematic when they occur online. The main problem is that students, as mentioned, often want a quick-fix and feel they have no time to develop necessary skills and understanding as in a face-to-face situation where there is some time for the flow of questions and discussion, the referencing of relevant material, reiteration and illustrations. Online the discussion process can often be frustrating for the student. By the time the SLS teacher and the student have constructed a shared understanding of the learning issues many e-mails may have been sent and deadlines maybe missed.

Online technology offers the scope to build a vast storehouse of generic study skills reference material which is probably why such sites abound throughout academic cyberland. Through original material and links to useful and worthwhile sites, the online student has access to a myriad of generic reference material. Yet often this material is hardly more meaningful nor interactive than a series of study skills texts. By their generic nature the information offered may be prescriptive, formulaic, genre and context free and rather hefty to wade through for a student on his/her own. For instance, the popular Purdue University site offers much, but can be rather daunting, particularly when considering that a student may not particularly be able to diagnose his/her own writing skill needs
adequately, depending on the issue, previous learning experience and anxiety factors which may hinder gaining the "distance" necessary to ascertain learning gaps and establish a set of positive learning strategies. A student needs to be self-directed and self-aware to be able to navigate and manipulate online study guides effectively for his/her own task or course requirements.

In order to customise and personalise the learning environment specific discipline sites that include SLS as a parallel or integrated service can be found. The student can choose to reference this material which may be directly related to reading and course tasks and designed to be adjunct to mainstream material. An example of this is http://ceds.vu.edu.au/buslaw.

We have already stated that the online learning environment is a peculiar learning and teaching space which, consequentially, elicits a particular perspective on the repertoire of study skills required to operate in this environment. SLS for online students must not overlook the aspects of SLS demanded by the online medium itself. We will take up this issue in terms of the triologue approach to online SLS we are currently investigating. Limitations to the provision of academic skill support will occur online just as they do in face to face SLS, thus, the importance of teaching such skills within the framework of a collaborative "trialogue" if we are to address the needs of online learners adequately.

The two key points here are: first, the Internet and the accompanying online technologies introduce new skills and knowledge. We now require students to develop new levels of computer and information literacy and communication skills arising out the use of computer facilitated communication. The second point is that online technology provides us not only with the potential for supporting the “trialogue” between student, teacher and SLS person in ways that were difficult in the past, but an imperative to do so if online SLS is to be at all effective. Joo (1999) suggests that the Internet affects the student teacher relationship. From the work we have done this seems to be the case as each takes on a collaborative and explorative role, collaborating in the objective of student learning. As Joo (1999) claims, this may be a different view of the teacher if a student is used to more teacher directed, authoritative roles. While the role of the discipline lecturer is to devise and organise content, the role of the SLS lecturer might be to look at scaffolding elements, embed facilitatory tasks and provide information on a number of teaching and learning approaches. Both working with the student to gain insights into the learning process and respond to learning
issues via agreed methods and delivery. The trialogue offers a framework for skills delivery as well as content delivery.

The SLS website: http://ceds.vu.edu.au/onlinesup

Booklets and online "delivery" best represent examples of the generic curricula where information related to topics and worked examples are provided to students. The online SLS environment lends itself well to this approach, as has been stated, and such information can be a useful first step resource. It often provides a framework for students to reflect on their skills and skill gaps and can assist in formulating specific questions or comments on learning issues that might need further investigation. The site we are building at present uses generic information which is aimed specifically at online learning skills but goes further by providing CMC environment which links the SLS lecturer and the content lecturer. Online forums that facilitate discourse between the three groups have the potential for raising everyone's awareness of online learning issues. Such forums publicly record the academic attempt to improve his/her teaching thereby resulting in an improved rapport between the student and teaching/SLS staff. The main objective is that students are facilitated in developing their learning to learn skills through the provision of an interactive, personalised and meaningful site that can be accessed as needs dictate. This site is collaborative in nature in that it invites student, peer and teaching staff participation in a shared learning experience. The site, thus, can be said to be a delicate one in that it only survives if there is involvement by interested parties. It is only as meaningful as the interaction dictates. The collaborative work that is undertaken online is needs based and student centred and as such addresses the learning skills required by the online environment itself. The following discussion reviews some of these skill areas and how these relate to the electronic learning landscape.

Online Learning Skills

Both asynchronous and synchronous communication are online tools that may facilitate a trialogue but, as we found, it does need to be monitored and moderated carefully. Often technology is dismissed as being too cold and impersonal for any sort of interaction. However, asynchronous and synchronous communication can assist in personalising the online environment as the student, the mainstream and SLS teachers all work collaboratively in facilitating student learning and competence.
Asynchronous communication appeals to students as it allows time to reflect on issues, formulate responses, meaningful messages and self correct, thus, lessening the problems associated with such issues as “loss of face” or self-esteem and reluctance to take risk. We found that some students enjoyed the opportunity to post e-mails to the SLS or mainstream lecturer as it offered a personalised means of communication, this supports Hoffman (1994 p,61) who that this medium was “faceless, in that it facilitates objective and honest interchanges of questions and idea, yet warm and personal, in that demonstrated the teacher’s commitment to be available.” It facilitates the reflective learning aspect of academic discourse. Importantly, it allows the student to work at an individualised pace so that no “confrontation” is exacted. The use of discussion lists for "knowledge sharing" (McLoughlin &Oliver, 2000) between peers and teachers is a valuable tool in this regard as a collaborative approach is modelled and instilled. Feedback is an important element of CMC, having the SLS and content lecturers on hand to respond to the online student means that there is increased opportunity for relevant and appropriate feedback.

However, retaining or attaining a sense of human interface between the teacher and the student through CMC can prove to be rather challenging. As anecdotal evidence suggests, the main difficulty is getting enough information from the student in order to ascertain areas of concern as sometimes electronic communication can prove to be a rather frustrating medium with a number of questions flowing to and fro before the real message is clear and apparent, as Laurillard (1993, p.190) states students "who are really struggling cannot even frame the question". In such circumstances it is vital that a trialogue is formed that addresses online study issues responding to student issues regarding content and learning skills and how each of these impinge on the other.

The importance of developing critical thinking skills has been felt even more as a result of the deluge of information students are bombarded with through the Net. Learners need to be able to read between the lines which particularly difficult given the cultural loading of communication, nonetheless it is essential that students are equipped with ways of sifting information and discarding misinformation students so as to be enabled to engage in the socio-political-academic world around them. Critical thinking involves analysis, comparing, deep level thinking and decision making. It is an important skill particularly as students advance in their studies. The type of analytical, critical reading and research skills required to navigate and study in such an environment are of a higher order than
those elicited from traditional study means. Indeed, the level of research and analytical skills mirror those required from postgraduate students.

Reading is recognised as a more complex skill online than as required by traditional print materials. The student is required to read in both a linear and non-sequential manner, it seems to be a more intensive and cognitively demanding approach to reading than when dealing with print material. The non-sequential nature of web material dictates the type of reading skills to be employed by the learner, whether it be reading for gist, scanning for specific information or indepth reading. The dilemma of an online student when reading is which links to follow so as not to derail oneself from a thread of argument, how to organise notes and materials and how not to fall into the trap of turning the process of analytical reading and research into a simple task of information retrieval.

There has been more research on the effect of technology on writing than on other skill areas, possibly because the word processor, the main tool, has already been with us for some time. The word processor has been recognised as facilitating the writing process and thereby motivating students. It is often claimed that the word processor makes the writing process obvious to the inexperienced writer, especially to the L2 writer (Dauite 1985; De Fazio 1995, Rodrigues and Rodrigues 1986). It assists by rendering the writing process an interactive one thus enhancing creativity and the general development of aspects of good writing habits (Oxford 1990).

Before we leave this part of the discussion it would be worthwhile considering the cultural aspect to academic discourse. We have already mentioned the importance of gaining a profile of tertiary students in order to come to an understanding of particular patterns of learning needs, indeed, one group of students that is being targeted commercially for online courses are overseas based distance students. We would argue that there needs to be an awareness that some “exported online courses” may have a Western - style, Australian focus and may be culturally unfamiliar in presentation, content and style. Some students may require support in such areas as exploiting the online environment as it was set up to be exploited. One area that immediately springs to mind is that of CMC. A relaxed discussion environment can sometimes be difficult to establish via face to face communication due to cultural reasons (respect, culture/gender issues etc.), attempting to establish open lines of "honest" communication via CMC modes may require explanation and coaching. Another aspect would be to unpack the culture bound aspects of online
reading, for instance jargon, idioms and stylistic issues. It would be worthwhile exploring how shared expertise that include the SLS teacher, the student course lecturers could come together to respond to the cultural implications of the online setting for international students.

**Evaluation of Student Support for Online Learning**

Online courses at VU, as at similar institutions, are being offered on the basis that they provide the student with a challenging learning environment, one that extends knowledge as far as the student wishes. One of the most interesting and valuable characteristics attributed to the online education environment is the empowerment of students. What is clear to us from experience and commentary in the area of online learning, that the online environment requires a different perception of academic discourse; approach to learning; repertoire of study skills and a more inclusive conversational model. This project is a relatively new one thus evaluation procedures were not finalised at paper the time of writing this paper, nonetheless, the following elements would be embedded in the evaluation component of the project.

Some key evaluation questions we must address include:

- Does our support for online learning include mechanisms for the systematic identification of student learning needs for all the students using online systems throughout the university?
- How effective are these mechanisms for identifying students and preparing them for study?
- How is our online support is integrated into the teaching of subjects that use online systems? What is an effective approach or set of approaches? How are staff and students making use of these approaches?
- Does our support facilitate cycles of student(s)-teacher-SLS staff conversations about the learning of the subject? How does it do this? How are the teaching staff and student ideas about teaching changed as a result of SLS intervention?
- Is the model of online SLS explored in this paper relevant and appropriate to our students (according to profiled and ascertained) learning needs?

A significant problem with evaluating student learning support for online learning is that we often want to know whether the teacher and students have significantly changed their practice in the light of their experiences.
Questions of this nature require us to use evaluation methodologies that allow us make judgements about changing practices of all concerned. Therefore, we need evaluation strategies that follow up on our interventions, sometimes a long time after the support activity.
Conclusion

It is envisaged that the advent of online technology in tertiary settings will instigate a review of teaching and learning responsibilities. Kenning and Kenning (1990) state that one of the advantages of the computer is the effect it has on the educator’s role in that “it alters the balance of power. By and large ...(it) tends to lessen the distance between the learners and teachers. ... In other words, ...(it) helps create an atmosphere of partnership between teachers and learners which is very much in line with pedagogical trends.”. The challenge as we see it is threefold: to move away from just providing "guides" to a more inclusive model that is in keeping with the conversational models outlined in this paper; to encourage a shared approach. This in turn, we feel, would create a better model of teaching and learning, one that draws upon a collaborative approach to student learning by providing academic skills support in a way that includes course staff, SLS staff and the student. Lastly, we can use online technology to provide different types of collaboration and information sharing that was not possible before. However, with this empowerment come certain challenges that will change our practice and our conception of it.

References


