Needs analysis: Identifying learning and academic needs of undergraduate students within a faculty

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Abstract

This research study investigated the need for learning support services for undergraduate students and their perceptions of how these needs could best be met. Responses to the survey showed that although students recognised the need for learning support, particularly in discipline specific areas, over half were unaware of the services offered, and even less has accessed existing services. Most students either worked independently or sought help from friends. This finding has implications for how, when and where learning support is provided and advertised. An integrated, discipline- and course-specific approach, adapted to students' needs, with a high level of teamwork between teaching staff and learning advisors is the recommended model to providing learning support for maximum student access and benefit.

Introduction

The central purpose of a learning support programme is to facilitate students' academic acculturation and transition to the university environment by enabling students to access the curriculum. The focus is on providing the scaffolding to develop students' independent learning skills, enabling them to navigate the new learning environment and understand the academic conventions required to access their course content and curriculum.

Collaboration with academic staff to integrate academic and literacy support programmes within disciplinary contexts and courses is essential to achieving enhanced student learning outcomes. Webb, English and Bonnano (1995) have identified benefits to students in locating learning support services where the learning and teaching occurs, where the needs of students can be identified and supported within a more discipline-specific context.

A survey of undergraduate students in a large faculty was conducted in December 2007 to determine if learning support was needed, in what areas it was most needed,

¹ Singh, N., & Harris, K. (2009). Needs analysis: Identifying learning and academic needs of undergraduate students within a faculty. In M. A. F. Silvester (Ed.), *Transformations: Proceedings of the 2008 Annual International Conference of the Association of Tertiary Learning Advisors of Aotearoa New Zealand (ATLAANZ)*, (pp. 21-36). Auckland, New Zealand: ATLAANZ.

and students' awareness and use of existing learning support. They were also asked to rate the type of learning support they required. The results of the survey indicate that a majority of the students indicated a need for some learning support, mostly in the area of 'course content', yet around half of the international students surveyed expressed the need for both study and language skills support. If students did experience difficulties with their studies they were more likely to work on their own or with friends than to go for assistance at a learning support service within the university. Less than half of the students were aware of support services available, and their perception of learning support offered was limited to study and language skills support – the more generic learning support. Only a small proportion of students actually used a learning support service in 2007, and they used what tended to be more readily accessible – for example on-line course material. When asked what learning support was required, it was evident that course specific support was very important.

The need for learning support is evident from the survey; however, the use of existing support is limited. Students indicated that the greatest need for support was in more discipline-specific areas, which suggests that a faculty-based learning support centre with extensive collaboration between learning support staff and academic staff may be in the best model to meet students' needs.

This paper is organised as follows: a review of the relevant literature on learning support and the rationale for this study is followed by an outline of the method used to develop the survey and analysis of the responses. Next, the results are described and discussed along with the limitations of the survey, and finally conclusions are drawn.

Literature review

The changing demographics of the student population at university in respect of a range of factors, including, language, culture, age, disability, gender, previous educational experience, entry pathway into university has called for rethinking the approach to meeting the learning and academic support needs of this diverse group. There is a move away from the conventional learning support programmes in the form of delivering ad hoc, generic workshops, seminars and lectures on academic literacy skills to one that is contextualised and situated within students' courses.

This review of the literature therefore examines different examples and studies on best practice in developing and implementing learning support programmes to undergraduate students.

The traditional model of a centralised language or learning centre has thus shifted to locating learning units within faculties, where the teaching and learning actually occurs allowing for the identification of the learning and academic needs of students and staff within the contexts of their disciplines. This also enables teaching staff to be accessed for their input. The increasing diversity of the undergraduate student population in Australian universities and the trend towards formal measurement of

graduate outcomes in higher education further highlights the need for integrated literacy programmes. These dual factors necessitate a more interventionist approach to student literacy skills. Universities 'can no longer expect their students to develop these skills spontaneously' (Webb, English & Bonanno, 1995, p. 338).

In their first pilot study, accounting lecturers collaborated with learning support staff to integrate the academic literacy skills within first year Accounting course. Using content specific material, writing skills were also emphasised through various activities in the course. This integration of the teaching of communication skills within the first year Accounting course, (Webb, English & Bonanno, 1995) identified the following benefits to students of an integrated approach:

- Holistic approach: 'there are no false dichotomies between the substance of the course (knowledge) and the language used to represent it.'
- Importance of literacy skills highlighted for students: 'their development is an integral part of the course.'
- Increased transparency for teaching staff about curriculum goals in literacy.

The second pilot study involved testing students' writing skills using the content of their (first year) Accounting course. The results of the test highlighted that most students had difficulty in organising, structuring, developing a cohesive argument, and using formal language in their writing.

A support programme was launched to address these skill needs for students who were deemed to be at risk of failure, based on the result of the writing test. Webb, English and Bonanno (1995) found that for the 10 (of the 35 invited) students who elected to participate in an intensive remedial workshop, there was a noticeable improvement in certain aspects of literacy skills of the students. This illustrates that while these integrated programmes are an effective tool which can help to address students' areas of weakness in literacy, if it is not compulsory for students to attend, the benefit will only be to those few who choose to attend.

In recognition of the growing debate regarding "literacy needs and practices at university ... and the expectations of industry of graduates" Hazell and Woodward-Kron (1996, p. 3) integrated the teaching of effective reading (such as the use of reading guides to demonstrate reading strategies including scanning, questioning, summarising) and essay writing strategies (including workshops on unpacking the essay question and structure of the essay) into the Costing Principles and Methods course.

The reading guides that were developed were initially not being maximally used by students as they were seen to be separate from the course materials. To overcome this, the reading tasks that students had to complete were more related to lecturer's questions and discussion. The writing workshops were well attended and informal feedback indicated that students found them useful (Hazell & Woodward-Kron, 1996). However, the study lacks any formal evaluation of the intervention, therefore the strengths and weaknesses of this programme are unclear.

A pre-course survey of students' learning experiences found that nearly half of students regularly had difficulty with key essay-writing skills such as structure, referencing, discipline-specific language and understanding essay requirements. Further, most students reported being generally unable to learn from the feedback they received on written work. The literacy intervention programme aimed to address these problems. The authors conclude that the intervention was low cost but 'time intensive' for the staff members involved and engaging casual tutors for subjects in the literacy programme was problematic as this part was not funded (Hazell & Woodward-Kron,1996).

The study by Murphy and Stewart is based on the following principles drawn from the literature on language and learning support, which illustrates:

- That language and learning skills are fundamental to the construction of meaning, and that language and academic programmes which teach these skills should be contextualised and embedded in the content being learned.
- An effective way of contextualising learning is through the development of a collaborative working arrangement between the language and learning lecturer and the subject lecturer, in which 'the contribution of the language and learning lecturer should be integrated into the subject content.
- The collaboration of subject lecturer and language and learning lecturer is 'to dispel the belief that language and learning skills are remedial; rather, ... these skills are developmental and need to be learned within their authentic context of use'. Thus, students and staff who perceive learning support as being required only for students who are at risk need to realise that all students need to be continuously developing these skills (Murphy & Stewart, 1999).

A language and learning skills programme was integrated into a first-year Business Law course in a three-stage process, at Victoria University of Technology. This process began with a voluntary language and learning skills programme which ran in parallel with compulsory course requirements. In the second stage, the regular tutorial programme was adapted to include a language and learning component. In the final stage of the programme, a supplementary website was developed for voluntary use, alongside the tutorial programme. Again it was found that the collaboration between subject lecturers and learning advisors was central to the success of this programme (Murphy and Stewart, 1999). 'The project was underpinned by the principles of equity and accessibility, and the need to develop lifelong learning skills' (Murphy and Stewart, 1999, p. 1). Assessment results showed that those who attended the workshops performed better than those who did not. The success of this project was dependent on collaboration between subject lecturing staff and learning advisors (Murphy and Stewart, 1999).

Drawing on Murphy and Stewart's comments regarding the first stage of the integration process (which was a content-based voluntary adjunct programme), we may note that adjunct programmes may sometimes achieve limited outcomes because

of resource constraints, their non-compulsory nature, and the fact that they are unlikely to be attended by those students most needing assistance.

English as Additional Language (EAL) students encounter a host of challenges when undertaking undergraduate university studies, in Australia, not the least of which is that there are "Cultural differences in such areas as learning styles, patterns of discourse and ways of relating with lecturers are of great importance" (Cargill, 1996, p. 177).

Some American universities have successfully employed an adjunct model of language teaching with undergraduate students from non-English speaking backgrounds, "in which an ESL ... course is linked with a selected content course and provides integrated language instruction using the course content and materials" (Cargill, 1996, p.178). She stresses, however, that collaboration between learning support staff and teaching staff from specific disciplines requires "a high level of goodwill ... mutual interest and understanding" (Cargill, 1996, p. 184).

A range of factors, both social and academic, impact on attrition rates at university. Although some of the literature is conflicting, there is a strong support in the literature for adequate, accessible student support services (such as academic skills advisors) to be provided to support students in what can be a very stressful time for students first entering university (Darlaston-Jones, Cohen, Haunold, Pike, Young & Drew, 2003). While there is no conclusive causal link between providing student support services and attrition, what is recognised is that a range of student support services are an essential resource for students, in particular first year students, having difficulties to transit to university (Promnitz & Germaine, 1996). The literature also supports effective orientation programmes which have been found to improve retention rates.

Tinto (2003) lists the provision of student support services as an important condition (amongst four others) for student retention. He states that:

Students are more likely to persist and graduate in settings that provide academic, social and personal support, most students, especially those in their first year ...require some form of support. ...whether it is academic assistance, social or personal support, support needs to be readily available and connected to other parts of student collegiate experience (p. 3).

The literature suggests that the key component of a learning support programme is integrating academic literacy skills within disciplines, for which a high degree of collaboration between teaching staff and learning advisors is necessary. Involvement of learning advisors provides the opportunity for relationship building and collaboration with staff to integrate and embed academic literacy and learning support programmes within courses and programmes.

A collaborative, coordinated, structured approach is required so that academic literacy and learning support programmes are driven both by teaching staff and learning

advisors, to maximise benefits to academic staff and students. Thus, learning support programmes are planned, customised and need to be targeted to students' specific learning needs.

Academic teaching staff draw insights from their interactions with students which learning advisors may not have. At the same time, interaction that learning advisors have with students provides insights into students' perspectives of and reactions to their learning experiences, which lecturers may not have. Thus, academic staff and learning advisors can share such insights, in a collaborative process, creating a feedback loop, to enhance our understanding of the factors that impact students' learning and how we may best address these.

There is some support for the development of contextualised learning support programmes located within a school or faculty (Webb, English & Bonnano, 1995). With this as background, this study surveyed undergraduate students in a large faculty, where currently no faculty-based learning support is available to undergraduate students, to determine their learning support needs and if these needs could be met either within the faculty or in a central learning support facility.

Any need for learning support identified by the survey would entail considering how learning support can be delivered to maximise undergraduate students' retention, transition to and success at university.

Method

Undergraduate students in the Faculty were surveyed about their need for, knowledge of and use of existing learning support services. Initially, student focus groups were conducted to develop a framework for the questionnaire. As well as demographic information, the questionnaires had several sections and asked students for their responses in the following areas:

- Student needs and learning strategies in which section students were asked if they had felt the need for learning support in 2007, in what areas they felt they needed support and what support they sought when they encountered difficulties in their studies.
- Student awareness of existing learning support services in which students were asked if they were aware of any learning support services in the university and how they became aware of the existence of these resources. They were also asked if one of their lecturers or tutors had recommended the use of to a learning support service. If so, had they used the recommended service and what might prevent them from using the services.
- Student perceptions of learning support services in which students were asked what they thought learning support services offered, and what benefits they would get from the services.
- Student use of existing learning support services in which students were asked if they had used a learning support service in 2007, and if so, which service

- they had used, why they chose the service they attended and if they found it helpful.
- Suggestions for learning support services in which students were asked how learning support could be offered most effectively.

In each section, the alternatives provided as responses to questions were developed as a result of the student focus groups, with students providing what they thought would be the most likely alternatives. The questionnaires also gave students the opportunity to add further alternatives. The questionnaire was pre-tested with a small group of students and no further changes were made. After pre-testing the questionnaire, the final version was mailed to all undergraduate students in the faculty.

Results

In total 311 students responded to the survey. The response rate was low as the questionnaire was mailed to students at the end of the academic year, however, the students who responded did represent all of the schools in the faculty. Of the 311 students who responded, 70% were Australian and 23% international, 42% were in the first year of their degree, 26% in the second year and 21% in third year, and almost all (84%) were in the 17-24 age group. All statistical analyses of the data were performed using SAS version 9.1. The results are organised according to the categories of questions in the survey.

Student needs and learning strategies

Of the 311 respondents, 227 (or 73%) indicated they felt they needed learning support in 2007. The need for support is reasonably consistent across Schools in the Faculty. The results, in Table 1, below, show that while a larger proportion of international students indicated the need for learning and academic support (79%), the proportion of Australian students who indicated a need for support was also high (71%). The need for learning support was reasonably consistent across year level of study.

Table 1. <i>Need</i>	for	Support	bν	Racks	round o	f Student
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	No Ar	nswer	Intern	ational	Austra	lian	Total	
Need for								
Support	N	%	N	%	N	%	N	%
No Answer	1	4.2	1	1.4			2	0.6
No	6	25	14	20	62	28.6	82	26.4
Yes	17	70.8	55	78.6	155	71.4	227	73
Total	24	100	70	100	217	100	311	100

Table 2 shows the areas in which the students surveyed felt they required learning and academic support. The area in which support was most required was course content. 53% of all students expressed the need for support in this area. Just over half of both international and Australian students felt a need for support in course content, and nearly 60% of 1st year students reported a need for this support, marginally more so

than those in later years of their degrees (50%). No specific detail was provided for the meaning of 'course content' in the questionnaire, however, interpretations in focus groups and in pre-testing gave this to mean the knowledge that students are required to understand. If this is the case, then this result would suggest that the students prefer to have more discipline specific support, perhaps requiring more additional information from lecturers and tutors about course expectations.

The area of support in which students indicated they required least support was language skills. This was not surprising considering that the largest group of students completing the questionnaire were Australians. However, 47% of international students felt they needed support in this area, compared to only 6% of Australian students.

Over 40% of students felt that they needed support with administrative requirements. This was more prevalent among local students (44%) than among international students (34%). Administrative requirements may be school or specific programme issues – or they could be university wide issues relating to such areas as examinations policy, plagiarism, and student responsibilities. This area of support requires further investigation.

Study skills were listed by 32% of students as being an area in which they needed support. 54% of international students who responded and only 23% of Australian students indicated they needed this support. There are international undergraduate students in both Level 1 and Level 2 courses who may be in their first semester or year at university. The need for study skills support is important for students in their initial exposure to new study environments where often different skill sets are required to achieve.

Table 2. Areas	of Support	Needed
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	Admi		Course		Study	Study Skills		Language Skills	
	Supp	ort	Conte	nt					
	N	%	N	%	N	%	N	%	
No	66	21.2	58	18.6	78	25.1	100	32.2	
answers									
No	116	37.3	88	28.3	135	43.4	165	53.1	
Yes	129	41.5	165	53.1	98	31.5	46	14.8	
Total	311	100	311	100	311	100	311	100	

Students were also asked what strategies they used to overcome any difficulty they had with their studies. The results are given in Table 3. The table indicates the most likely strategies students used to overcome any difficulty they had with their studies. Clearly, the most common strategy students use to overcome difficulties is to work by themselves or to work with other students/friends. Very few are not likely to use either a private tutor or a learning support service. The average response for the former two strategies is around 2 (at the most likely end of the scale) compared to the

average response to using a private tutor and learning support service of 4.7 and 4.2 respectively (nearer the least likely position of 6).

Table 3. Strategies to Overcome Difficulties

	Work my ov		Work with friends/othe r students		Talk to a tutor/lecture r		Go to a learning support service		Work with a private tutor	
-	N	%	N	%	N	%	N	%	N	%
No answer	14	5	17	6	15	⁷⁰ 5	24	8	27	⁷⁰ 9
	136	<i>3</i> 44	99	32	47	5 15	4	0	4	
1. Most likely							8	3		1
2.	60	19	129	42	87	28	-	_	2	1
3.	78	25	40	13	123	40	22	7	15	5
4.	15	5	15	5	26	8	133	43	69	22
5	4	1	8	3	9	3	101	33	150	48
6. Least	4	1	3	1	4	1	19	6	44	14
likely										
Total*	311	100	311	101	311	100	311	101	311	100
Mean	2.00		2.02		2.57		4.31		4.72	
	0		4		8		0		9	
STD	1.12		1.04		1.04		0.91		0.90	
	4		3		2		5		9	

^{* %} may not add to 100 because of rounding

Student awareness of learning support services

In this section, students were asked if they were aware of any learning support services in the university, how they became aware of the existence of these resources, if they had been recommended to use a learning support service, and if they had followed up on the recommendation. Table 4 indicates the level of awareness of learning support services among the students who responded to the questionnaire. Twenty percent were aware of learning support services in the faculty. There are currently no undergraduate learning support services located in the faculty, so this suggests that perhaps the students have a relatively broad definition of learning support, or that they are confusing faculty support with other services available in the university. It is easier to explain students' awareness of learning support services in Schools – much of this support could be from both academic and professional staff – course advice or assessment support etc.

Less than half of the students were aware of the learning support services offered by the University's central learning centre. This should be of concern as the service is widely advertised within the university and on student services and course specific web sites.

Table 4. Awareness of Learning Support Services

Awareness of learning support services	% Yes*
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University learning support centre	45
Student's School	37
Faculty	20
Other areas in the University	18

^{*} Note that the percentage in the table will not add to 100 – some students would have responded positively to knowledge of two or more support services.

Table 5 indicates that students became aware of the learning support services in the university from a variety of sources, with the most common source being course-based – from the course web site or from their lecturers or tutors.

Table 5. How Students Became Aware of Learning Support Services in the University

Source of information:	%
Course specific web site	22
Tutors/lecturers	22
Emails/e-newsletters from Schools	18
University of Adelaide website	15
Posters/brochures	10
Friends/other students	13

35% of students indicated that a lecturer or tutor had suggested that they go to a learning support service; however of these students only 31% followed the advice. This is a very poor response as teaching staff would be unlikely to recommend a service unless it was thought that the student would benefit from developing their skills in a particular area.

Table 6 highlights the factors that may prevent students from using learning support services offered by the University and adds to our understanding of why students do not make greater use of learning support services offered.

Lack of knowledge about the services offered and lack of time to access those services were cited as the main reasons preventing students using the services. Together with the number of students who listed difficulty in finding information and the location of the services, the results in Table 6 have implications for the Faculty and Schools. Providing clear information on the types of services offered, details of those services, the location and the outcomes that could be expected may increase the number of students who access learning support services. Establishment of faculty based learning support services should also increase both the awareness of and use of learning support.

Table 6. Factors Preventing Students Using Learning Support Services

Factors preventing use of learning support:	%
Lack of knowledge about the services	23
Lack of time to access the services	20

Not knowing location of the services	16
Difficulty finding information about the	14
services	14
Feeling intimidated about approaching the	10
service	10
Not directly related to the course	10
Not compulsory	7

Student perceptions of learning support services

Students were asked what they thought learning support services offered, and what benefits they would get from the services. In Table 7 help with study skills and help with language skills could be classified as generic skills, whereas help with course content and supplement to lectures and tutorials could be seen as more discipline specific skills. The table shows that help with study skills was seen by students as the main service that was offered by student learning support services. Almost a half of the respondents thought that learning support services helped with language skills. Thus, it would seem that most students see learning support services as offering help with generic learning skills.

Table 7. What Students Think Learning Support Services Offer

Learning support services offer:	% Strongly Agree/Agree
Help with study skills	67
Help with language skills	47
Help with course content	37
A supplement to lectures and tutorials	26
A remedial service	24

This is supported in Table 8 which shows that almost three quarters of the students expected the benefits of learning support services to be improved writing and study skills. Increased confidence could well follow from improved study skills, and better understanding of course content may be a result of improved language and study skills.

Table 8. What Benefits Students Think They Might Get from a Learning Support Service

Benefits of learning support services:	% Strongly Agree/Agree
Improved study and writing skills	72
Increased confidence	62
Improved language skills	52
Better understanding of course content	50

Student use of learning support services

This section asked students if they had used a learning support service in 2007, and if so, which service they had used. They were also asked why they chose the service they attended and if they found it helpful.

Twenty-six percent (81) of all respondents indicated they used a learning support service in 2007. There was little difference between the proportion of international students and the proportion of Australian students who used the services in 2007, and a slightly higher proportion of first year undergraduates used learning support services than did those in later years of their degree.

The learning support services used are given in Table 9. Clearly, those support services that are more readily accessible to students are better used than those which may involve some uncertainty and require more effort on behalf of the students to access. Alternatively, they may not be aware of the availability of university learning support services.

Table 9. Learning Support Services Used

Learning Support Service	% who used the service
Orientation-week lectures	58
Course specific web site	38
University learning support services drop-in desk	22
Workshops/courses run by Schools	31
University learning support services workshops	20
Other	9

Students were asked why they chose the services they attended. Their responses are given in Table 10.

Table 10. Reasons for Choosing the Learning Support Services Used

Reasons for choosing services used:	% who gave this reason
Offered the support needed	58
Recommended by a tutor/lecturer	47
Required for the course	35
Convenient time	31
Convenient location	23
Recommended by a friend/other student	17

Other <1

When asked if they found the services they attended were helpful, 79% indicated that the services were either helpful or very helpful.

Suggestions for learning support services

The students were asked how learning support could be offered. The responses are summarised in Table 11. Apart from bridging programmes, a clear majority of students agreed that all the alternatives suggested could be offered to support learning in the Faculty. Students were most supportive of support being offered in lectures – perhaps reinforcing earlier responses where students indicated that little time for attending learning support services, not knowing where to find them and lack of knowledge about the services contributed to preventing them attending the services. This also supports earlier responses from students where they indicated that course content, and administrative requirements were the areas of support most likely to be needed. It should also be noted that specific assessment tasks and individual consultations were popular suggested areas of learning support, indicating that students are focussed on specific course related tasks.

The results in Table 11 and Table 7 indicate that students perceive learning support services as currently offering generic study and language skills rather than course specific skills, but that they would like learning support to offer more help in specific course related tasks.

Table 11.	Learning	Support –	How	Could it be	Offered?

Laguing granget	% Strongly	
Learning support	Agree/Agree	
Information given during lectures	76	
Workshops on specific assessment tasks	71	
Individual consultations	69	
Drop-in services	66	
Workshops for specific groups of students	61	
Bridging programme	38	

Discussion

The results highlight the student need for learning support. Unfortunately, although the need does exist less than half the students surveyed are aware of what support does exist. Only a small proportion of students used the learning support facilities currently provided, and these are mostly discipline-based support, readily accessible on course websites, through orientation lectures and workshops provided through the schools. Very few students had used the centralised university learning support services, even when recommended by academic staff. Whilst one of the main areas of need for students was 'course content', generally, students understood the university support

service to provide help with the more generic skills, for example language and study skills, which may explain why it was more likely they would use course- or school-based learning support. Students also indicated they were more likely to seek help from their friends than a learning support service if they encountered difficulties with their studies. When asked what learning support could be offered, consistent with other responses, the students indicated that discipline-based support was the most appropriate.

Generally, the students have expressed a need for discipline-based learning support that is readily accessible. This confirms the contention of Webb, English and Bonnano (1995) that cooperation with teaching staff is important in helping to identify the learning needs of students in the context of their discipline and for implementing more appropriate learning support services. Thus, consideration needs to be given to how learning support should be delivered in order to maximise students' success at university.

Student literacy programmes that are offered in little pockets, uncoordinatedly and arbitrarily, taken on only by a handful of teaching staff within a school are not fully effective. Developing a whole Faculty and School approach, involving all teaching staff is integral to addressing issues in student literacy more effectively. It is essential for the School management and leadership to reflect a commitment to measures, in policy and practice to address this issue. The conversations about student literacy within the school need to be ongoing, so that learning programmes are reviewed, evaluated and improved.

The development of strong collaborative partnerships, between learning support, teaching staff and Schools to ensure learning support programmes are relevant to students' learning needs, is essential to a sound academic literacy programme and improved learning outcomes for students. Such an approach combines the expertise of both the learning advisors and lecturing staff to the benefit of the students.

Such an integrated whole school and collaborative approach requires an investment of time in the immediate term which teaching staff may be reluctant to sacrifice given their already demanding schedules. Once established, these programmes can potentially, in the medium to long term, ease staff schedules as students develop these required academic skills and become more confident.

Another issue that requires consideration is how to get the most number of students, who really need these programmes, to attend them. If the learning centre programmes are not compulsory, students who most need this intervention often choose not to attend. This situation is compounded because those students most in need of this support may "already [be] under a great deal of pressure to keep up" with their compulsory course requirements (Webb, English & Bonnano, 1995, p. 348). Again a whole school approach, where the emphasis of student literacy is emphasised throughout the students' programme is one that can help in this respect.

There are some limitations to this study. Firstly, since the survey was mailed to students at the end of the semester, this may have had a bearing on the number of responses received. It is also possible that those who really need this support did not respond because of their lack of time and English language proficiency.

Secondly, although the survey was developed using focus groups of students, and pretested, there are elements of the survey instrument that are not clearly specified. For example, there is no indication of what the students understand by 'course content'.

Conclusion

The analysis of the results of the study from students' perspectives demonstrates that students feel there is significant need for course and discipline specific learning and academic support. There is general consensus in students' responses that this service is beneficial to their studies. However in order for this service to be effective, it needs to be flexible, as immediately located and as easily accessible as possible.

A faculty learning support learning centre could provide discipline and course specific support in a number of ways, including in mathematics, statistics, transition and orientation programmes, integrating language and study skills support into courses with extensive collaboration with teaching staff by conducting, for example, course specific assessment workshops. The student experience at University, in particular, the first year experience can be a more positive one.

A more systematic and integrated approach to the development and implementation of learning support programmes is required to more effectively equip students with the academic literacy skills they need to be successful in their study programmes and in the workplace.

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