Journal of Academic Language & Learning Vol. 5, No. 2 2011, A118-A130. ISSN 1835-5196



Partnerships for student success: Integrated development of academic and information literacies across disciplines

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(Received 21 July 2011; Published online 28 November 2011)

Many students commencing study at university are faced with expectations very different from their previous educational experiences, particularly in relation to academic and information literacies. In response to these widely recognised challenges associated with the first year experience, learning advisers and librarians develop extra-curricular activities and resources that support students to understand and meet the expectations. Although the activities are often presented in separate classes by learning advisers and librarians, academic and information literacies are intrinsically connected and students benefit from understanding the close connection between researching and writing assignments. With this connection in mind, a number of models of learning support have emerged over the last decade bringing together the knowledge and skills of learning advisers and academic librarians. Most of these integrated learning support models share two elements: firstly, a focus on generic skills development like search strategies and essay writing; and secondly, a move to co-locate staff into the same unit like the university library. In contrast, a three-way collaborative model for developing academic and information literacies is possible - one that develops the literacies seamlessly but is tailored to specific disciplinary expectations in a range of courses across disciplines; and one that does not require the co-location of learning advisers and librarians. This paper discusses current models of support in Australia for developing academic and information literacies and details the three-way collaborative model. It argues for integrated support through collaboration that is discipline specific.

Key Words: academic literacies; information literacies; model of integrated learning support.

1. Introduction

First year students commencing study at university in Australia are a widely diverse group in terms of their socio-cultural characteristics, their expectations about higher education, and their level of preparedness for it. For most, their success is largely determined by what they experience in the first year of study when they often move from relatively small educational communities to large institutions involving complex administrative systems (Kift, 2008).

Indeed, many students do not progress beyond the first critical year at university, often leaving as early as the first few weeks (Krause, 2006).

According to Kift and Moody (2009), anxieties around assessment play a critical role in the first year experience and students are often challenged by the "academic languages and conventions (including assessment genres) they ... encounter as the vehicles for evidencing learning success in higher education". In most universities, the ways that support is provided for developing literacies varies but are, in the main, offered as extra-curricular classes and resources. This paper discusses academic and information literacies in higher education and ways in which their development is facilitated at university. It further details a collaborative model designed to facilitate developing the two sets of literacies in a seamless way that has been in place at the University of South Australia since 2006. We argue that close collaboration with lecturers in faculties – both program directors responsible for degree programs and course coordinators – is essential to break down the "silos" (Kift & Moody, 2009) that might otherwise exist in support provided by separate units in universities. It is only through close collaboration with lecturers that curricular and extra-curricular interventions can be integrated strategically, systematically and seamlessly.

2. Literacies

2.1. Academic literacies

In terms of academic literacy, the practices in universities differ between disciplines and can be viewed as social practices that are common to individual disciplinary communities. From the students' perspective "a dominant feature of academic literacy practices is the requirement to switch their writing styles and genres between one setting and another, to deploy a repertoire of literacy practices appropriate to each setting, and to handle the social meanings and identities that each evokes" (Lea & Street, 2006). Becoming "literate" is an essential part of university study and students are engaged in a kind of apprenticeship during which they gain insights into how texts work, the range and purposes of academic writing, as well as expectations around academic integrity and referencing systems. They need to be able to use these understandings to, for example, elicit significant points in reading academic texts effectively and utilise them in academic argument. Being academically literate is, therefore, more than acquiring a set of skills or a learning process but is, rather, an understanding of the ways in which the valued texts of the discipline of study are constructed to reflect specific ways of thinking and knowledge construction and the ability to write in ways that reflect the valued texts peculiar to each.

In terms of academic literacies, Lea and Street (2006) identified three approaches or models of how "student writing" is supported in higher education. Firstly, there is a "study skills" model which assumes that writing is comprised of a set of skills which can be remediated through training. Secondly, there is an "academic socialisation" model which assumes writing as a "transparent medium of representation" and "one culture" which can be inculcated into students through writing courses. Thirdly, there is the "academic literacies" model which views student writing and learning as issues at the level of epistemology and identities rather than skill or socialisation – it assumes knowledge as constituted in discourses and power, where writing is taught within disciplines as well as generic courses on language/writing awareness. Examples of these three models are currently evident in universities, however, a key objective listed in the Association for Academic Language and Learning Position Statement (2010) indicates a preference for Lea and Street's third model – to "support the development of core, disciplinary academic and professional language and learning strategies and attributes in all higher education students". Indeed, Wardle (2009) claims that students need to learn genres in context and suggests that, since students often find it challenging to write in a new academic discipline, that they need to learn through the juxtaposition of different texts how writing conventions vary across discourse communities.

2.2. Information literacies

Information literacy, on the other hand, has been defined as "an understanding and set of abilities enabling individuals to recognise when information is needed and have the capacity to locate, evaluate, and use effectively the needed information" (Association of College and Research Libraries, 2000). The standards listed in the Australian and New Zealand Information Literacy (ANZIIL) Framework (Bundy, 2004) are useful to describe the information literacy maturity of an individual, the relationship between each of the categories, and processes and methods to assist an individual become more information literate. They can be viewed as a set of progressive stages or building blocks, with skills in the earlier categories being necessary to develop skills in the later categories. As with the development of academic literacies, some authors state that information literacy development needs to be integrated into the discourses of the disciplines. For example, Peacock (2008) argues for "information literacy knowledge and abilities development to be woven into content, structure, and sequence of curriculum" (p. 2). This notion is emphasised at the University of South Australia in one of the Graduate Qualities that students are supported in developing during their study – a UniSA graduate "is prepared for life-long learning in pursuit of personal development and excellence in professional practice", and within that includes the indicator of being able to "locate, evaluate, manage and use information in a range of contexts – i.e. be information literate" (University of South Australia,

As with academic literacy, commencing first year university students all possess some level of information literacy, though the scale of maturity varies widely. A study by Ellis and Salisbury (2004) of first year Arts students, for example, found that commencing students often do not have information literacy levels required for basic university research, and that the quality of their assignments is affected. For example, first year students often rely on internet sources alone, ignoring other sources of information. One response to addressing these needs can be found in Hegarty and Carbery (2010) who developed a structured, tiered approach to information literacy training by integrating its development for all years and all levels. They argue that this approach is an effective way to scaffold development of information literacy.

3. Models of support

Most universities provide induction programs to support students in making the transition to university study and learning to write academically. Many of these are offered during orientation periods and in the first weeks of study as a "just in case" strategy. They are often provided as Lea and Street's (2006) "study skills" model as extra-curricular generic skills development sessions delivered by staff outside the central courses of study. For example, learning advisers often conduct classes on academic reading and writing as well as time and workload management while academic librarians usually offer early training sessions on using the library catalogue and searching databases.

Where attempts have been made to integrate the development of literacies with the content of courses, there are differences in the way the collaboration with lecturers is reported. Jones, Bonanno, and Scouller (2001) drew on Dudley-Evans' (2001, as cited in Jones, Bonanno, & Scouller, 2001, p. 226) three levels of co-operation with discipline staff to examine collaboration between learning advisers and lecturers. The first level involves a "consultation" where learning advisers contact lecturers for information about their expectations of the course content and the assignments. The second level they termed "collaboration" where the learning advisers and lecturers work together to develop extra-curricular activities to support students. The third level they refer to as "team teaching" where both learning advisers and lecturers teach together. They further discuss a number of ways of approaching partnerships in the faculty-based programs and suggest a continuum from adjunct workshops ("weak" discipline focus or "strong" discipline focus), integrated workshops and lectures (within the students' disciplines) and embedded where collaborative design of a curriculum is organised around the development of literacies and taught by lecturers rather than learning advisers.

An examination of models currently reported indicates that there are many examples of what Lea and Street (2006) termed the "study skills", the "academic socialisation" and the "academic literacies" approaches. In terms of collaborations among staff, it is also clear that examples exist that match each of the levels defined by Dudley-Evans (2001, as cited in Jones, Bonanno, & Scouller, 2001), with some involving brief consultations about expectations, others involving collaboration, and a limited number involving team teaching.

In most cases, the teaching is delivered as face-to-face classes in the form of lectures, workshops and individual appointments. Lectures are routinely podcast and loaded on to course websites which enable students to (re)view the lecture content as though they were part of the face-to-face audience. Delivery also occurs as hard copy independent study resources, but there is increasing use of electronic means to teach and provide resources on developing academic and information literacies.

3.1. Generic study skills models

In the academic language and learning (ALL) literature in Australia there are many reports of successful generic study skills models (see Proceedings of Language and Academic Skills/Academic Language and Learning Conferences). The ways in which the classes are usually organised and implemented vary, but are often offered as generic academic reading and writing classes like "Essay Writing" open to all students regardless of their discipline of study. Thies and Henderson-Wilson (2010), for example, discuss the debate around generic and specific approaches and reported on the effectiveness of combining the development of generic skills and specific skills.

Although many examples of generic models exist, Kift and Nelson (2005) argue that extracurricular activities like generic study skills classes operate as silos, separated from the main academic activities and that in many cases, students fail to see their relevance, particularly early in the semester when they have just arrived at university. Even where the classes are timely, students are often less keen to attend because they do not see them as directly relevant to their assignments. Where approaches are made by lecturers to learning advisers or academic librarians to run extra-curricular classes for students who have failed assignments, the "deficit" model exacerbates students' resistance to what can be perceived as extra work provided by staff unrelated to their Faculties (Baik & Greig, 2009; McKauge et al., 2007; Watt 2006).

3.2. Two-way collaboration – Learning Adviser and Course Coordinator

Examples of collaboration between learning advisers and course coordinators are also widely reported. The rationale for working collaboratively is neatly explained by Clerehan, Moore and Vance (2001), who drew attention to the transition that students in first year must make as they move from one discipline to the next within their degree program. Given that each discipline has its own "variations in knowledge structures and norms of inquiry, different vocabularies, differing standards of rhetorical intimacy" (Bhatia, Candlin, & Hyland, 1997, as cited in Clerehan, Moore, & Vance, 2001, p. 132), resources for students need to be discipline specific. A collaborative approach between learning advisers and lecturers enables the goals of the disciplinary community to be identified and articulated and also "enables the interpretation and explanation of these as writing practices" (Crosling & Wilson, 2005, p. 7).

Specific examples of the two-way collaboration between learning advisers and discipline lecturers have been reported, among others, at the University of Wollongong (Skillen, Merten, Trivett, & Percy, 1998; Percy & Skillen, 2000) and the University of Sydney (Jones, Bonanno, & Scouller, 2001). At the University of Wollongong (Skillen et al., 1998), an "IDEALL" approach was adopted as a developmental approach. Collaboration between discipline and learning development academics is central to their model to enable the learning materials to be tailored to the needs of the curriculum and/or the provision of subject-based workshops. The workshops are team-taught by staff from the discipline and the learning development unit.

3.3. Two-way collaboration - Librarian and Course Coordinator

A number of studies have reported the success of two way collaboration between academic librarians and course coordinators. Barnard, Nash, and O'Brien (2005) in their study on developing lifelong skills through nursing education recognised that although there were internal and externals barriers to integration of information literacy into the curriculum, the overriding objective was for students to develop and apply these transferable skills within the context of courses, rather than as a separate process. Corbin and Karasmanis (2010) integrated information literacy development into online materials for first year students in health sciences. The integration involved references to the online materials in course materials and the work was linked to assessment through quizzes. They found that students showed moderate improvement in their information literacy skills. Cook, Nielsen, Stewart, Edwards, and Baker (2009) used a curriculum-based information literacy embedded in a nursing program involving close collaboration between librarians and discipline staff. In a paper on embedding information literacy skills across the three years of a biotechnology degree, Ward and Hockey (2007) reported on their successful collaboration but proposed that future projects needed to be expanded to include collaboration with a learning adviser to include language and learning support. In 2009 the University of South Australia Library won an award from the Australian Learning and Teaching Council for outstanding contributions to student learning for "sustained commitment to strategic and diverse information literacy programs that help students engage as learners with the information environment". This award confirmed that collaboration between academic librarians and course coordinators contributed to programs that enhanced student learning.

3.4 Two-way collaboration - Learning Adviser and Librarian

Two-way collaborations between learning advisers and academic librarians have also been trialled. One example can be seen at Monash University where since around 2007 the learning skills staff and librarians have been co-located and have collaborated to review their roles and map the tasks and responsibilities of each professional team to identify areas of difference and overlap – the latter being identified as lying in critical evaluation, defining research questions, refining the scope of the research, and referencing. Another example is a university-wide framework developed at the Queensland University of Technology (QUT) incorporating both academic and information literacy (Peacock, 2008). Peacock (2003, 2008, 2010, 2011) has described the integrated literacies framework at QUT and reported that it "unifies academic literacy (study skills and writing skills) and information literacy (research and discovery skills)". She states that where most Australian universities offer different forms of learning and study support, they tend to be centralised and not located in schools, and that they are "generally provided by disparate agencies (e.g. writing centres and libraries) between which services are sufficiently disconnected to confuse and frustrate students and – at worst – obstruct timely, positive intervention" (Peacock, 2011, p.14). In both Monash and QUT, the learning advisers and librarians are co-located in the library and this is reported as an important element in the success of the collaboration. However, in view of Lea and Street's (2006) models, the approach used appears to be more in line with a "study skills" model than academic/information literacies. Further, the approach appears to be a generic one, mainly outside the discourses of the disciplines with little of the "collaboration" with staff in faculties (Dudley-Evans, 2001, as cited in Jones, Bonanno, & Scouller, 2001, p. 226). Students are expected to transfer the "skills" to their own disciplinary writing without explicit guidance on the thinking and writing expectations peculiar to each. Although the strong connection between the learning advisers and academic librarians has been shown to be effective in generic programs, it could be argued that there is a more important "disconnect" with faculty staff who, given the variations between disciplines discussed earlier, are essential in the development of teaching materials and resources around academic and information literacies. Clearly, a three-way collaboration is indicated to integrate the development of academic and information literacies into the mainstream experience of students.

3.5. Three-way collaboration - Learning Adviser, Librarian and Course Coordinator

A three-way collaboration between learning advisers, librarians and course coordinators to achieve integration of academic and information literacies development into the mainstream experience of students has not received much attention. In a 2001 article by Spurrier and Stevenson, three-way cooperation rather than collaboration is reported between an academic teaching staff member, a learning adviser and a librarian. The focus was a first year business course where the librarian and learning adviser had negotiated to deliver joint classes on both sets of literacies as relevant to a major assignment in the course but as additional to subject content. Here the focus was on question analysis skills and search strategies. As well as the class, a resource was developed to mirror the classroom activities with additional materials on academic writing relevant to the specific assignment. They also suggest that librarians and learning advisers need to be involved earlier in course development – particularly the assignment setting – rather than having the last minute training as an "add-on".

More recently, Einfalt and Turley (2009a, 2009b) have reported on a three-way collaboration between disciplinary staff in business, a learning adviser and a librarian. They also claim that there is a "curious disconnection" between "Librarians and Skills Advisors ... in terms of content, development, delivery and student engagement" and see the separation as an "invisible intellectual wall between those who teach students to write and those who teach students to research" (Fister, 1992, as cited in Einfalt & Turley, 2009, p. 44). Their model involved collaborative team-teaching sessions integrated into course delivery in four first year business courses. Like others, their views of academic literacy and information literacy are as skills linked directly to student success (p. 42).

As is evident in the range of models, learning advisers and academic librarians have in the main collaborated with discipline lecturers to tie the support for literacies development closely to the area of study, and this has been done by focusing on assessment because of its influence on students' study behaviours (James, McInnis, & Devlin, 2002). Apart from the work reported by Spurrier and Stevenson (2001) and Einfalt and Turley (2009a, 2009b), very little else appears to have been reported as a three-way collaboration between the course coordinators, learning advisers and librarians.

4. UniSA: Three-way model of integrated development of academic and information literacies across disciplines

In 2006 on one metropolitan campus at the University of South Australia (UniSA), two learning advisers met the team of four academic librarians to discuss possible overlap in the separate extra-curricular classes each team offered first year students. During these discussions it became clear that learning advisers and academic librarians had presented similar information to students but in different ways. It also became clear that there was some overlap and that different usage of the term "key words" was being made which was confusing students. It also became clear that both teams were experiencing similar pressures associated with supporting large first year cohorts of students in developing academic and information literacies with limited resources and that some sort of strategic, systematic and systemic approach could be developed. This is supported by Krause (2006, p. 1), who argues that universities need to be strategic in their attempts to "shape novice students' experiences, attitudes and behaviours", firstly because students themselves are strategic.

The aim of the approach at UniSA was to support as many students as possible through targeting courses in degree programs where the development of literacies could best be integrated for the large number of commencing students. As has been discussed, a discipline-specific approach is widely favoured as the most effective way to address the needs of many students within the discourse of their study. What was envisaged was an ambitious campus-wide model of support for key courses in Schools built around assessment items, strategically timed ("just in time" rather than "just in case") and incorporating the literacies appropriate to the year level. For the activities to attract and retain students, they needed to be well designed,

explicit, directly relevant to specific and immediate needs, and tied to the discourse of the discipline of study (Kift, 2008).

An important feature of the proposed model was to link learning adviser and academic librarian initiatives to assessment items because assignments usually determine students' behaviours – indeed, "for most students, assessment requirements literally define the curriculum" (James, McInnis, & Devlin, 2002, p. 7). The importance of the link to assessment is also emphasised by Orrell (2005, as cited in Kift & Moody, 2009), who claims that "at the very minimum ... they [students] need to be supported in their early development and acquisition of tertiary assessment literacies. Critical to this attainment is the necessity to alleviate early anxieties around assessment information, instructions, guidance, and performance". More recently, Kift and Moody (2009) agree and propose that students can be better engaged when scaffolding of assessment is integrated into the curriculum. What was needed was to find a way for the joint learning adviser/academic librarian interventions to be perceived by students to be part of their mainstream experience. In other words, the model needed to make possible a seamless integration of academic and information literacies development into students' experience of their courses. This would only be possible with a three-way collaboration of the course coordinator, the learning adviser and the academic librarian.

In the same year, and with the approval and support of the Dean: Teaching & Learning, members of the learning adviser/academic librarian team approached program directors in four faculties to discuss the model and its implementation in their degree programs. Courses in the degree programs involving assignments requiring demonstration of academic and information literacies were identified by the program directors. This process took account of fairly typical first year assessment practices where the emphasis is on academic writing for an essay or a report, information on referencing and plagiarism, and basic research strategies. Further discussions took place with the relevant course coordinators to explain the aim of the strategic model and to seek agreement to integrate the development of literacies support, traditionally provided on request in separate learning adviser and academic librarian classes, into the student experience of the course and to ensure that the classes were closely aligned to the individual lecturer's expectations of demonstrated literacy levels.

Given the different discourse communities involved, the outcomes of the discussions were, as expected, different in terms of levels of collaboration, extent of integration possible and modes of delivery with each program. For example, in one degree program where a large number of students enter with credit for most of the first year courses, the program director identified courses in both first and second year as containing assessment of both academic and information literacies as part of the grading of papers. In other programs, the program director identified one or two courses, while in others, several courses in first year were considered important in terms of developing academic and information literacies. Where second year courses were identified by lecturers, it was possible to consider a more comprehensive approach where the academic and information literacies from first year could be extended with the addition of new concepts like learning to look for statistical information to provide evidence for a report.

Discussions with the course coordinators led to close collaboration – again in different ways. With some course coordinators the teaching materials were jointly developed; with others, the teaching materials were reviewed by the course coordinator; with yet others, the same processes were followed, but the assignment questions were collaboratively developed by the course coordinator, learning adviser and academic librarian. The teaching took the form of joint lectures and/or extra-curricular classes conducted by the learning adviser and academic librarian, often with the lecturer in attendance. It also included online workshops that mirrored the classroom experience, providing off-campus students easy access to similar levels of support. These resources are highly valued by students and are discipline-specific examples of those that won an Australian Learning & Teaching Council Award in 2002. In some cases, additional support was offered as "drop-in" sessions, but these were only offered by the learning adviser/academic library staff.

The success of this approach over three years on one campus of the university led to its introduction and implementation at a second metropolitan campus. At the end of 2008, meetings were arranged with the program directors of three degree programs with large numbers of commencing students – some entering programs with credit. These early meetings led to close collaboration with six course coordinators in one degree program and several in others. As before, there were differences in the levels of integrated support achieved. In the Bachelor of Nursing program, for example, the collaboration resulted in integrated support in six courses in the first two years of the degree – in different ways and with different degrees of integration. The courses were for students commencing their study as first year students and those entering the university program in second year with credit. Variation existed in the number and kinds of integration of collaborative question design, lectures/podcasts, electronic resources and extracurricular activities. Table 1 below represents the range of integrated support in the Bachelor of Nursing.

Table 1. Patterns of integrated support in the Bachelor of Nursing at UniSA 2009-2011 for all commencing students

| Study Period | Course | No of students | Assignment | Question Design | Lect/ Pod | Elec. Res. | Extra- Curr |
|------------------|-----------------------------------|----------------|---|--------------------|--------------|---------------|----------------|
| Feb to Jun | First year Nursing course | 536 | Essay plan Essay Report | * * | √ ✓ | ✓ ✓ | ✓ |
| Feb to Jun | *First year Nursing course | 463 | Essay plan Essay | ✓ ✓ | √ ✓ | | ✓ |
| Feb to Jun | Second year Nursing course (2009) | 817 | Essay | | | ✓ | |
| Jul to Nov | First year Nursing course | 579 | Report Portfolio item | ✓ | ✓ | ✓ ✓ | |
| Jul to Nov | *Second year Nursing course | 798 | Essays 1 & 2 | | ✓ | ✓ | |
| Jul to Nov | First year Nursing course | 498 | Reflective paper Research paper Health report | * * * | ✓ ✓ ✓ | ✓ ✓ ✓ | |

^{*}Courses including 2nd year students commencing their degree with credit.

The model was evaluated in several ways: online surveys of students, online surveys of staff, and minute papers using three simple questions at the end of lectures.

5. Evaluation

To assess the effectiveness of the face-to-face sessions and online resources available to students in the targeted programs and courses, electronic surveys were conducted at the end of 2006 and repeated in 2007 with over 600 students and nine course coordinators. The aim was to evaluate the effectiveness for both students and lecturers and to adapt the approach where necessary for study periods in the future. The response rate was approximately 30% for the five survey groups; overall, responses from 380 students were received. Seven out of nine course coordinators also responded to a separate survey.

Students were questioned about the effectiveness of the online and face-to-face workshops in helping them understand the question, undertake research and write their assignments, and

improve their overall grade. Approximately two thirds of the respondents indicated that the workshops had helped them to improve their grades. They reported that the workshops and online resources helped them to understand the question and the requirements of academic writing and referencing. Students felt more confident in accessing resources through databases and understanding how to use the library catalogue.

Students' written comments were overwhelmingly positive. For example, commenting about face-to-face workshops one student responded:

"Being in my first semester at uni I wasn't really sure how to go about researching assignments and what is expected of you. The workshop really cleared that up and gave great tips for researching."

Other student comments about online workshops were also positive:

"It helped to cut the assignment up into smaller pieces and focus on what the question was actually asking. It helped to ease the stress out of it."

"I could find step by step information on how to write the essay."

"Step by step research methods for the library catalogue database ..."

"Could read the information in my own time, at home, without any pressure, over and over to understand what was expected of us."

"The essay workshop was probably the most helpful thing in the whole course."

Students also commented on the fact that online workshops provided valuable information on how to access resources, were available when needed, and that face-to-face workshops gave clarification and support. Only a handful of students made negative comments about not needing the support.

The survey responses indicated that the timely response of learning advisers and academic librarians to the needs of students grappling with university assignments, often for the first time, brought about positive outcomes for students and course coordinators. The help was timely, positive and supported students' needs for clarification of question analysis techniques, academic writing, referencing skills and research skills. Both course coordinators and students benefited from the face-to-face and online workshops.

When the model was adopted at the second campus, student feedback was sought in the form of "Minute Papers" at the end of lectures consisting of the following three questions: "What was most useful for you today in this class?", "What was not useful?", and "What suggestions or comments do you have?". The results of these surveys indicated that students had most highly valued learning how to analyse questions, understand the expected genres, reference and undertake searching. In terms of the second question, very few gaps were named, and in response to question three, suggestions for improvements were limited to requests for the presenters to slow down and to provide more classes. For some courses, questions were also added to the university's standard "Course Evaluation Instrument" (CEI), resulting again in high levels of satisfaction with the assessment support received from the staff teaching in the course which included the course coordinator, the learning adviser and the academic librarian.

Course coordinators were asked in what ways the online and face-to-face workshops were helpful to themselves and the students. The response was overwhelmingly positive. Comments included that it was good having online materials and workshops to support the students. The support provided enabled course coordinators to concentrate on teaching content rather than academic skills. Students who accessed resources performed better than those who did not. There was consensus that learning advisers and academic librarians were very supportive and reinforced what was said in class, reducing the number of times that lecturers needed to reiterate information. There was evidence also that most students used academic resources and resources other than Google for their research. Comments from the course coordinators were positive both about the materials developed and about the collaborations.

"Just thought that you might like to know that we have had good feedback so far about this resource from internal and external students. I will be really interested to see if it translates into the quality of their assignments -I'll keep in touch."

"I am really happy with this [online workshop]... thanks for your help. I forwarded it to the tutors and asked that they comment."

On reflection, the learning advisers and academic librarians were aware that the close collaboration with the course coordinators had led to being able to successfully reach and support many more students through the targeted courses in first year than without the collaboration. For example, in one degree program, an average of 45% of students attended the face-to-face sessions and there were between 208 and 673 hits recorded on the corresponding online resources. The collaboration has also led to more explicit explanations of the expectations of the lecturers. Informally, the learning adviser noticed a substantial decrease in the numbers of students seeking one-to-one help about the relevant assignments. Although the workload for both learning advisers and academic librarians was demanding in the initial year of the approach on both campuses, the sessions and resources proved to be effective and efficient.

It is clear from the data that not all students take advantage of the interventions; however, overall, the outcomes of the strategic approach have been positive in that there have been:

- an increased level of student participation;
- a significant reduction in the demand for one-to-one support for drop-ins and individual appointments; and
- positive responses to surveys indicating that students value the sessions and resources.

Although the evaluations focused largely on students' responses and were not undertaken in a consistent way each year, the positive responses obtained have led to the continued implementation of the model and its expansion. Suggestions for improvement about the timing of the support and resources have been successfully adopted; for example, the lecture dates have been changed to be offered in a more timely way for students – or offered 2-3 weeks before an assignment was due. Further expansion into other Schools and courses is planned, and the evaluations will continue to monitor students' needs, expectations and responses. However, the level of expansion will need to be carefully determined because of resource implications. It will also need to be considered in terms of other aspects of learning adviser and academic librarian work and the priorities of the university.

6. Conclusion

Many students commencing study at university are faced with expectations very different from their previous educational experiences, particularly in relation to academic and information literacies. In response to these widely recognised challenges associated with the first year experience, learning advisers and academic librarians provide a range of interventions to facilitate the development of the literacies. Various models of support exist which have brought together the knowledge and skills of learning advisers and academic librarians. Most of these integrated learning support models focus on generic skills development like search strategies and essay writing, and are often provided without collaboration with lecturers. Where there is collaboration between staff it occurs predominantly as a two-way collaboration between learning advisers and course coordinators or academic librarians and course coordinators.

More recently, however, there are indications of three-way collaborations and the model discussed in the paper is one example. The model at UniSA integrates curricular and extracurricular activities and resources for developing academic and information literacies into the discourses of the disciplines in a seamless way, thus making them highly relevant – particularly for first year students seeking explicit guidance on assignment writing. In terms of Lea and Street's (2006) definitions, however, the approach needs to be seen as one that somewhat succeeds at being an "academic literacies" model in programs where integration continues beyond the first study period into later year courses with elements of "academic socialisation" and "skills". Where the integration is more piecemeal, further work on expanding the collaboration is clearly indicated.

The success of the model is due to a large extent to the close collaboration with the discipline staff (program directors and course coordinators), which has enabled the staff in units (learning advisers and academic librarians) to work in a strategic, systematic and systemic way to support large numbers of commencing students and to maximise the impact of limited resources. Although discussions and planning requires several hours, the close collaboration with the discipline lecturers has enabled a seamless integration of both academic literacies and information literacies development through common goals. It is these effective relationships, rather than a need for co-location of staff in units, that have underpinned the successful implementation of program-based support for students.

Acknowledgements

We would like to acknowledge the contributions to the project by the learning advisers and academic librarians involved from 2006 to 2008. We would also like to acknowledge and thank all the program directors and course coordinators who worked with us and whose assignment questions were central to the work.

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