

Creating confidence: developing academic skills and information literacy behaviours to support the precepts of tertiary academic performance

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Abstract Fostering the skills required for students to access and utilise information in a manner consistent with the expectations of tertiary assessment has been the drive for collaboration between the Faculty Librarian and the Academic Learning Skills Lecturer at the University of Southern Queensland. Mapping key areas of convergence in information literacy and academic skills has led to a model of integrated instruction and academic support based on the belief that creating a foundation of skills in these areas leads to a commensurate level of self-efficacy. By building skill and confidence levels, especially in students making a transition to university in their first year, staff can influence learning behaviours including those which may lead to breaches of academic integrity. This model can be accessed by all students which is especially important to ensure parity of program experience for off-campus cohorts who are often expected to undertake study with a greater degree of autonomy than their on-campus peers, yet who, just like their on-campus peers, often need an opportunity to develop their academic skill base.

Key Ideas

- There is a convergence between information literacy skills and academic learning skills.
- Student transition including the development of appropriate learning behaviours can be made easier by the provision of support in the development of these skills and subsequent increase in self-efficacy.
- The skills are best developed in an integrated model developed through a collaborative approach between practitioners.
- There is a requirement for the model to be inclusive in that it must be available to all student cohorts.

Discussion Question 1 Where is the interface between information literacy and academic learning skills?

Discussion Question 2 How does scaffolding of information literacy skills and academic learning skills help reduce academic integrity issues?

Introduction

Consistent academic performance is the key to students' success at university. This paper explores the culture that is university and looks at the expectations of both students and staff. It examines the demands we place on students and their ability to meet these demands. We also explore students' belief in their ability to cope and whether the two are commensurate. We discuss the features of a support base we have developed that we believe helps students bridge the gap

between the actual skills they possess and those they imagine they have. This support base is an interface of two domains – information literacy and academic learning skills. By situating the support in context and facilitating the development of crucial skills, we are providing an opportunity for students to grow as learners and embrace and immerse themselves in the academic culture of their chosen discipline. Once students see that their skills have increased, their confidence grows. Academic performance improves and issues of academic integrity are reduced.

What are academic skills?

Academic learning skills at university is a topic that often generates robust debate amongst staff. The debate hovers in two areas: firstly, what skills should be included under this banner and secondly how and where they should be acquired by students. However, even before particular skills can be included or cast aside, there is controversy over the title – academic learning skills. Academic skills have been defined and listed in a number of different ways in recent years. Some institutions have chosen to separate academic skills from what they term study skills (Wingate 2006).

While argument about the title and where to situate the skills is understandable, we believe the development of the skills is the integral feature. For the purposes of this paper we have defined academic learning skills as those skills that a student needs to achieve success in a course of study. This includes the skills relating to information literacy.

Information Literacy

Whilst numerous definitions exist for information literacy, the brevity, yet depth of Bundy's (2000, p.5), lends itself best to this discussion, describing it as

the capacity to recognise the need for information, and then identify, access, evaluate and apply the needed information. An information-literate person is one who has learned how to learn.

This multi-faceted approach is desirable as it articulates the behaviours associated with the information literate person, but also focuses on the meta-cognitive processes inherent to the deeper acquisition of these skills (Reece, 2007, p.482), as well as implying a level of critical thinking. Students increasingly rely on online resources for the completion of assessment, with first-year students transporting behaviours from previous educational settings, without the expectations surrounding the use of academic information being explicitly stated. As such, many lack the skills to appreciate information quality, or that discipline-specific tools (such as databases) are more appropriate to support academic assessment. Additionally, the information literate person in their use and application of information does so in an ethical manner, respecting intellectual property and copyright (Bundy, 2000), thus conceptually linking the continuum to correctly citing information sources – another skill often lamented by academic staff.

Collaboration – the joining of two silos

The integration however is undertaken in two key areas: that is, that academic learning skills and information literacy competencies are developed conterminously and that these skills are contextualised by discipline. Whilst the manner in which information is sought, evaluated and utilised can be generalised, treating these skills as extra-curricula, or 'bolt-on' to course material, de-contextualises the skills and diminishes their relevance to discipline content.

Given the significant overlap between these areas, little benefit was perceived in continuing to offer segregated inter-curricula classes, but rather to investigate a model which took an integrated approach to the development and support of these complementary skill sets. Boudreau and Bicknell-Holmes most eloquently express the convergence of information literacy and ALS, in that "effective writing and presentation skills are diminished if used to share flawed or incomplete information" (2003, p.148). Investigation of the scope of the author's roles concurred with this statement, and necessitated a more collaborative approach. The University was concurrently seeking to align these responsibilities on a strategic institutional level, but our approach was more operational, focusing in tangible deliverables and benefits in student support for the Faculty.

Historically, academic skills have been taught at universities in an extra-curricula, de-contextualised or 'bolted-on' approach. This was the case because these skills were believed by many academics to be ones that students should bring with them to university - in their suitcase along with a clear understanding of all that would be expected of them on their higher education journey. The skills needed to read and write well at university should have been acquired in their school education.

While it has been accepted for some time that not all students do have or exhibit these skills, it has been thought that the ones who do not should be directed to a 'place' beyond the realms of the faculty, where they can be topped up with them. They may then return to faculty and resume the 'real' pursuit of knowledge. These students have been variously termed 'weak', 'at risk' or 'non-traditional'. With the advent of post-modernism, this traditionalist approach is being replaced with one that focuses more on a social/structural sensibility (Gamache 2002). Despite academic staff's reluctance to involve themselves in skill development and the fact that it is not considered to be 'the remit of course designers' (Lea 2004), it is becoming recognised that academic skills are not 'unitary'; they are both 'cultural and social' practices and vary according to context (Lea 2004). In other words, students learn them better if they are taught within their terrain, their chosen discipline (Lloyd and Williamson 2008). Certainly current research suggests that skills are best learnt when contextualised or in situ.

Despite the overwhelming amount of current research to this effect and espousing the benefits of an integrated approach to the acquisition of academic skills, such skills are still largely 'taught' outside the discipline (Dorskatsch 2003), paying homage to the student deficit model. Many academics still believe the teaching of domain content is the primary function of university courses. Many of them see the inclusion of the development of study skills or academic writing skills as taking precious time from the teaching of discipline knowledge. We argue that they can and should be taught together. To not facilitate development of learning skills in context is to neglect 'the complexity of learning at university' (Wingate 2006). One danger of this de-contextualised approach is that students

see the acquisition of study skills as end in itself rather than as a tool to achieve a learning goal (Gamache 2002). It encourages a superficial understanding of what learning is and supports the use of shallow ineffective learning practices. But Gamache (2002) suggests that there is more to it than this. He claims that students need to be active in the learning process – that they need to be allowed to construct even create their own knowledge.

Experiential learning posits learning as a process where 'knowledge is developed through the transformation of experience' (Kolb 1984 cited in Kolb & Kolb 2005). By instructing students on how best to study or learn (as in the de-contextualised model), university staff are negating the opportunity for students to experience a problem and decide on a course of action, and reflect on the experience (Wingate 2006). Reflection is an important learning tool. It is the tool that the learner uses to mark his/her progress along the journey that is skill development. The instructional de-contextualised approach cannot accommodate reflection. Instead it insists on making the students see how and when they need to transfer generic skills to the context of their domain knowledge. This of course takes time which is another limitation of this approach. Additional time beyond that taken up with course/program requirements is time that we know students simply do not have. The challenge was further compounded within USQ's Business Faculty by the sheer number of distance education students, both domestic and international, who comprise between 70-80% of the total student enrolments in any given semester. The question was, "How can we consistently support information literacy and academic learning skills acquisition within the Faculty, aligning with the established course learning outcomes in a manner which provides parity of experience for both on- and off-campus students?" This is a daunting undertaking at best and offered many avenues for investigation. Acknowledging that there was no perfect solution, but instead seeking to develop a dynamic, organic method for this support allowed us to narrow the initial focus, whilst providing opportunities for the scope to grow appropriately as the model evolved.

As two staff members from the 'other' domain, that is from support sections and not faculty, our influence within the students' domain is limited. Nevertheless, by providing a virtual context-based space where students can respond and question course concepts, we are facilitating engagement, whereby students can negotiate meaning and construct knowledge by engaging in active self-direction (Gamache 2002).

Transition – the first year experience retention and academic integrity

Students entering tertiary education often have a very high opinion of their online skills (Oliver 2008), but lack the distinction between the information technology literacy and information literacy. Whilst significant overlap exists between these literacies, the ability to use a computer and the internet needs to be supported for an appreciation of using appropriate resources to support assessment coupled with critical judgement of the resources located during these searches (ILAC 2006, p.4). Additionally, it needs to be recognised that the information resources provided by a library, whilst of a higher quality than their 'open internet' counterparts (Rowlands, Nicholas, Williams, Huntington, Fieldhouse, Gunter, Withey, Jamali, Dobrowolski & Tenopir 2008), are far less intuitively designed, often resulting in frustration from inexperienced users (Gross & Latham 2007).

This means that students are likely to experience stress during their first piece of tertiary assessment. They fear a lower academic performance compared to secondary education.

Certainly, many students find their first major assignments daunting, regardless of their experiences prior to their opening the door to the university world (Krause 2001). They often feel isolated and alone at university, even if they are on campus with the blur of other bodies constantly around them. There are many adjustments that must be made quickly in this process of acculturation and not the least of these is learning academic conventions and literacies and writing in a way that will meet the expectations of their lecturers in their early assignments. A study by Krause (2001) revealed that out of eight research and writing skills considered difficult by the surveyed cohort, the most difficult of all was considered to be locating relevant references. This same survey also underlined the general apprehension felt by students: 'I don't feel confident enough to speak to my tutor about the essay question because they might think I'm stupid or something' (Krause 2001, p.159). And it noted that the participants' most widely requested form of support was models and examples.

The experience of this first assignment is a crucial one for students. Krause's study emphasises the opportunity for making support for assignments a 'vehicle for academic integration' (Krause 2001, p.164). This creates a tri-fold challenge of nurturing their existing skills, whilst allowing them to recognise the need to continually develop those same skills, and providing the support and environment to do so.

First year students are new to the culture of university and this includes its research base. While they generally begin to recognise quickly that finding references is a difficult yet integral part to writing assignments, they often have not yet developed the skills to appropriately integrate their research into their writing. In many ways the university's research culture and the processes and procedures that live within it are tacit. It is hard for students to recognise the hidden agenda of this culture, let alone understand and adopt it.

This lack of familiarity with academic writing can result in students not following referencing procedures accurately. The response of many universities is then to invoke the sinister juggernaut of plagiarism. Students often operate under fear of this monster, and under threat of its malevolence they often resort to foolish, unmindful behaviour (McGowan 2005). We suggest that increased self-efficacy through skill development is the key. Providing support and opportunity to practise skills such as writing academically (that is using references from researched material) is integral to facilitating success in this culture. Similarly, the provision of models can help make the expectations of academics in this culture more explicit. The more transparent the research culture and its components are, the easier it is for students to gradually assimilate and respect the incorporated conventions. Therefore, by fostering academic learning and information literacy skills, a respect for the precepts of referencing become a by-product, rather than the focus of, the instruction.

Reasons to support integrating ALS/IL instruction and support via Moodle

Our belief was that there was a direct correlation between students' perceived self-efficacy and their willingness to engage with the instruction required for them to successfully research and present assessment. That is, the more confident they felt about pursuing a task, the more likely they were to succeed. Oliver (2008, p. 2) highlights this as integral to first-year students, who often feel far more confident than is actually appropriate (Gross & Latham, 2007, Goldfinch & Hughes 2007, p.261), lacking the ability to distinguish, especially from an information literacy standpoint, the difference between being able to use technology and being an effective searcher and critical thinker (Rowlands *et al.* 2008). Therefore, student confidence needs to be directed into appropriate learning opportunities with recognition that information literacy and academic learning skills require constant development (Goldfinch & Hughes 2007, p.271).

This creates a strange dichotomy in the approach required by the authors in that on one hand students displayed high (yet unsupported) confidence in information seeking and evaluation, yet very low confidence in the academic application for this information. In both domains, students needed to both realistically acknowledge their individual skill levels, and appropriately develop them further.

Compounding this is the necessity of providing adequate support to off-campus and off-shore students to ensure parity of experience and learning outcomes. It can be reasonably argued that distance students undertake study in a far more autonomous fashion and are heavily reliant on online technology to support their assessment (Bielma, Crocker, Miller, Reynolds-Moehrle & Shaw 2007), yet face the same issues as their on-campus counterparts.

The most logical solution was to create an environment wherein students could access the needed support, independent of their location, and one which offered asynchronous learning opportunities that were directly relevant to their discipline-specific requirements (Yi 2005). The University of Southern Queensland had made the strategic decision to implement Moodle as the university-wide learning management system, requiring each course to maintain online content. This 'warehousing' approach was extremely suitable, offering students the opportunity to engage with a range of learning resources available via a single virtual learning environment. Part of Google's attractiveness (which has to be accounted for in student decision making for sources of information) has been a single entry point allowing access to a range of resources — hence our design was influenced by the fact that if the skills, instruction and support were to be integrated, the electronic presence should be as well. Forcing students to navigate through two (or more) very different sections of the university website seemed to defeat the purpose.

The learning environment is populated by a range of resources, utilising different technologies to achieve engagement with different learning styles and to fulfil very different roles. For example, screen-casts provide demonstrations of particular skills (such as database searching techniques) and can be easily created 'on-demand' to meet student needs. It is the 'on-demand' creation of resources that allows the environment to be dynamic and responsive to student needs, thus being an exercise in value-adding and relevance-building, as well as a learning experience. On the other hand, podcasts and online fora fill other roles necessary to facilitate student support and learning.

Whilst this was trialled in the first semester of 2009 with only seven courses, usage remained consistently high as well as offering a sustainable support model for students in courses outside of the trial. The resource was accessed 4024 times over the semester, and of the 383 direct e-mail enquiries received from students 78% were able to be answered by referring students to existing learning resources within the page.

From semester two onwards, the virtual learning environment will be accessible to all courses at under- and post-graduate levels throughout the Faculty. However, this represents the first phase of the implementation of the model and the Faculty-wide adoption presents continuing and emerging collaborative opportunities for the authors. At the core of the resource is the idea of partnerships, between the Library and the Learning and Teaching Support Unit; but most importantly, between the Faculty and these divisions. Collaboration with academic staff is integral to achieve 'instruction in context' (Wu & Kendall 2006) with faculty buy-in essential to the project's continued relevance and success. Additionally, opportunities have been identified to trial a model for face-to-face classes wherein academic learning and information literacy are developed in parallel within the discipline knowledge domain. It is believed that this model will be more effective than previous segregated classes and student and academic staff feedback will be used to refine the model during the semester.

Conclusion

Acculturation to the university environment is integral to students' success. This paper examined the demands we place on students within this culture and their ability to meet these demands. It suggested that there is a gap between the academic expectations and requirements of staff and the skill base of students. Our paper outlined the features of a support base we have developed that we believe helps students bridge the gap between the academic skills they possess and those they need to succeed. We believe that with a contextualised approach to the development of academic learning skills (including information literacy and referencing), self-efficacy is increased and problems with students' understanding of the process of academic writing, including the integration of quotation, is greatly reduced.

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