

Supporting academic literacies in an online environment

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Acquiring competence in academic literacies is complex and is often directed by the orientations and practices valued by a particular discipline area. Often, students who have not been oriented to the academic literacies of their discipline are expected to participate in high levels of academic discourse without appropriate scaffolding or support. Recognising this, the University of South Australia (UniSA) set up a Language Literacies Learning (L³) website in 2012. The purpose of this website was to provide academic language and learning resources to support the development of students' academic literacies in their discipline areas. Although the activity report from the L³ website has indicated that it is popularly used by students, it was agreed pre-implementation that the website would have to be evaluated to ensure that it was performing in the way it was intended to and identify any gaps that would inform its future development. This paper reports on a study that was carried out to evaluate the L³ website. Two main research questions guided the collection of data, namely, 1) Do the online resources adequately support the development of the students' academic literacies in their discipline areas, and 2) Do the resources provide students with the scaffolding they require to produce the genres of their discipline? Data was collected through the administration of an online survey and semistructured interviews conducted on a representative sample of students in UniSA.

Key Words: Academic literacy; academic language and learning, online environment.

1. Introduction

The student profile of Australian universities has changed in the last decade (Daryl & Hocking, 2011). Today, students populating institutions of higher education in Australia are more diverse socially, culturally and linguistically (Gunn, Hearne, & Sibthorpe, 2011). Consequently, there is a necessity to ensure that students have the competencies to participate in the academic discourse of their disciplines in order to successfully complete their chosen study programs. However, for many novices "new" to the tertiary setting, the concept of "academic discourse" is often unclear and challenging. Students are often expected by academics to demonstrate their ability to engage in academic discourse by employing the appropriate discipline specific genres when listening, speaking, reading or writing in their study programs. These expectations, accompanied by other factors such as adapting to a new learning environment, striving to become independent learners, and meeting the heavy demands of their study program, can often impact negatively on student experience, learning outcomes and retention. For the "uninitiated", academic literacies can be challenging as they are a set of practices employed by a community of practitioners that is often governed by the historical, social and cultural contexts of a

discipline. Empirical research indicates that students can be socialised into the literacy practices of their discipline with the necessary scaffolding. Recognising this, the University of South Australia (UniSA) initiated a Language Literacies Learning (L³) website in 2012 as one of the activities to support students with the academic literacies of their discipline. Besides this website, there were other language and learning services available to students, namely, 1:1 consultations, face-to-face workshops and the systematic embedding of academic literacies in selected programmes. The website was chosen as a platform to promote academic literacies as it allows for the dissemination of information to a larger audience. The L³ website is an online environment that supports student learning through discipline specific resources designed to introduce the associated academic literacies through models and examples. This paper reports on a study undertaken to investigate the adequacy of the website and whether the existing resources provided students with the necessary scaffolding to produce course specific assessment tasks.

2. Academic literacies

The debate associated with academic literacies has been evolving since the 1970s. Although in the past, researchers investigating academic literacies focussed on students' discipline specific writing (Turner, 2012; Lillis, 2001), the current emphasis is on social practices associated with academic study (Lillis & Curry, 2010). Literature in this field emphasise that the concept of "academic literacies" is shrouded with much ambiguity. Academics are often unclear about what this practice entails and how it should be implemented in their classroom. This often results in unfair expectations that students produce high quality responses that demonstrate the academic literacies of their discipline without the provision of appropriate modelling and scaffolding. It cannot be denied that there is an important relationship between content and student writing (Hocking & Fieldhouse, 2011) and students have no choice but to develop an understanding of the genre-based practices of their discipline.

A common institutional practice is to teach students study skills with the assumption that they would be transferable to other contexts. This form of teaching perceives content as detached from writing. However, disciplinary practices with regard to genre and language significantly vary within and between disciplines. Students often struggle to both comprehend what these practices are and to demonstrate them in the production of their tasks. This frequently impacts on learning outcomes. The academic literacies approach acknowledges that students are challenged when trying to interpret the relationship between language, the discourses of their study program, and institutional practices (Hocking & Fieldhouse, 2011). Scaffolded examples about discipline specific genre-based writing and how language is used to communicate meaning in particular courses or study programs can contribute to the development of students' academic literacies. When given the opportunity to identify the purpose of a particular genre, the way language is used to communicate meaning, the structure and organisation of the content, as well as how these practices differ in different contexts, the acquisition and transfer of academic literacies will unfold more effectively. An online platform to disseminate such information not only facilitates learning of academic literacies as an ongoing process, it also enables integration into discipline specific discourse (Wingate, 2006). Furthermore, a website that locates all the academic literacies of a discipline allows students to compare how genres differ in different settings, thus creating awareness about writing for different contexts.

The Intersegmental Committee of the Academic Senates (2002) define academic literacies as the

reading, writing, speaking, listening, and thinking skills, dispositions, and habits of mind that students need for academic success. It includes the ability to critically read and interpret a wide range of texts, to write competently in scholarly genres, and to engage in and contribute to sophisticated academic discussion. (as cited in Warshauer, Grant, Del Real, & Rousseau, 2004, p. 526)

Cummins (1988) argued that it takes students approximately seven years to master their Cognitive Academic Language Proficiency (CALP). It is therefore unfair for academics to presume that students would be able to demonstrate particular behaviours in the discourse without "making explicit the values and practices implicit in the culture and provide novices with the language, skills, support, and opportunities they need to participate with growing competence in the new culture and its core activities" (Duff, 2010, p. 176). Furthermore, Vygotsky (1978) argued that all cognitive functions originate as social functions. Learning was not simply the assimilation and accommodation of new knowledge by learners; it was the process by which learners are integrated into a "knowledge community" characterised by the "academic discourse".

Central to the processes of teaching and learning is Vygotsky's (1978) concept of Zone of Proximal Development (ZPD) which he used to refer to the difference between a currently achieved developmental level and the potential development of an individual that was considered in the design of instruction. Students' potential development can be advanced through "scaffolding". "Scaffolding" was defined as a process "of negotiated interaction in which experts first assess the learner's level of competence and determine the types of assistance they need to accomplish a particular task" (Hall, 2001, p. 31). Although the notion of "scaffolding" was commonly associated with teachers or tutors providing students with face-toface support in order to overcome their learning challenges, with the advent of the computer and Internet, this process is now commonly undertaken with education technology (Belland, 2011). Literature in this area identifies that the scaffolding of academic literacies is increasingly undertaken through an online environment (Crook, 2005; Gunn et al., 2011; Warshauer et al., 2004). Factors such as large cohorts of very diverse student profiles, resistance from academic staff to embed academic literacies in their courses, and instructors who feel ill-equipped to teach them, strongly justify that scaffolding academic literacies in an online environment is the way forward. The next section of this paper justifies the advantages of using the online environment to scaffold academic literacies and discusses how this is undertaken in UniSA's L³ website.

3. Using the online environment to scaffold academic literacies

Although the literature specifies that the best way to promote positive learning outcomes is to embed academic literacies in the curriculum, this is often challenging as it is difficult to secure compliance from academics who are instrumental in the process (Bright & von Randow, 2004; Ransom, 2009). Scaffolding academic literacies via an online environment can address many issues. For instance, research has demonstrated that it takes students approximately seven years to acquire their CALP. Hence, teaching these skills in one or two semesters in first year courses would probably not provide students with enough opportunities to "practice, reinforce and transfer the skills" (Gunn et al., 2011, p. 2). Furthermore, the profile of Australian universities has revolutionised the manner in which teaching and learning is undertaken today. It is often lamented by academics that some students no longer physically come to university to attend lectures because they can access a majority of their learning resources online.

The literature also emphasises that students in tertiary settings often do not seek face-to-face learning support because of low self-confidence and self-esteem (Karabenick, 2004; Kozanitis, Desbiens, & Chouinard, 2008). In addition, approximately 22 per cent of students studying in Australian universities are international students (Australian Bureau of Statistics, 2011). Many of these English as a Second Language (ESL) students are already challenged by their degree of language proficiency and struggle through their study programs. The problem is often magnified by their inability to comprehend instruction during face-to-face contact with their instructors because of factors such as accent, speed of speech and limited vocabulary.

Online learning can address most of the concerns highlighted in the literature. In addition, an online platform allows the acquisition of academic literacies in a non-threatening environment. Resources that sit on a website can be accessed for any amount of time and can be linked to course homepages, thus making them relevant to genre-based discourses. Moreover, the learning of academic literacies can be scaffolded with as many models and examples as is seen

necessary to make discipline specific genre-based practices clear for students. There are no limits to the number of resources that can sit on an online platform. These resources can be regularly adapted to meet the demands of assessment tasks and can be designed in collaboration with the course instructors to make them more relevant to the content.

Gunn et al. (2011) argue that resources for an online environment can be designed in order to be customised and incorporated into the curriculum for specific assignments in different subject areas; align[ed] with terms of the University's Academic Plan and Graduate Profile statements;...flexible, portable and user-focussed; ... [and] to motivate and engage students from a range of educational backgrounds and age groups. (p. 4)

Resources for an online environment can also be designed to address local teaching and learning needs, be disseminated to a greater proportion of audience, and can be accessed anywhere or anytime. Students who suffer from low self-confidence and self-esteem can access these resources in a stress free environment and use them as they see fit. ESL students who are impeded by low English language proficiency will not be constrained by time to comprehend and react quickly as is often the requirement in face-to-face contact. Scaffolding academic literacies via an online environment will allow all students the opportunity to practise, reinforce and transfer skills.

4. UniSA's Language Literacies Learning (L³) website and academic literacies

The researchers of the current study were not involved in the conceptualisation of the L³ model. However, it appears that the design of the L³ website was based on the Theory of Learning Assistance and Scaffolding (Vygotsky, 1978). The architecture and the resources that sit on the website were directed by literature on how students learn in social contexts and how teachers can scaffold that learning (Whipp & Lorentz, 2009). In this instance, the social context was the "academic discourse" and the teachers were the Language and Learning Advisers (LLA). The mode of communication was an online learning environment and the medium that was used to disseminate information was text, audio, as well as video, to cater for diverse learning styles and preferences. The platform for the website was the MOODLE environment.

The splash page anchored four divisional (Business (BUE), Education, Arts and Social Sciences (EASS), Health Sciences (HSC), Information Technology, Engineering and Environment (ITEE)) L³ websites. Figure 1 illustrates UniSA's L³ splash page. Students enrolled in the different divisions could access their division's website from this splash page to register for workshops on academic literacies and download resources to help them with their assignment tasks. The Widening Participation website, set up to cater for the learning needs of regional and external students as well as those enrolled in UniSA via other pathways, sat alongside the four divisional L³ websites. The development of the L³ divisional websites enabled all division-specific resources to sit within a localised environment.

The resources on the L³ website were designed to scaffold "the knowledge of the culture, circumstances, purposes and motives that prevail in particular academic settings" for students (Partridge, 2002, p. 20). The genre-based resources were scaffolded to promote the acquisition of academic literacies in an online environment. This was complemented with face-to-face contacts in academic literacies workshops and individual consultations with LLAs. Students were presented with the academic literacies of their disciplines by introducing, modelling, exemplifying and providing opportunities to practise the different genres. In order to take them to their potential level, students were provided with many resources designed around disciplinary knowledge contained in the curriculum; strategies to produce new knowledge by interacting with the academic literacy practices of their discipline, and techniques to transfer these skills to other contexts (Hocking & Fieldhouse, 2011). The resources were multimodal and engaging. A social presence (Swan, 2003) was established on the website through online forums where students could post questions associated with referencing and exams.

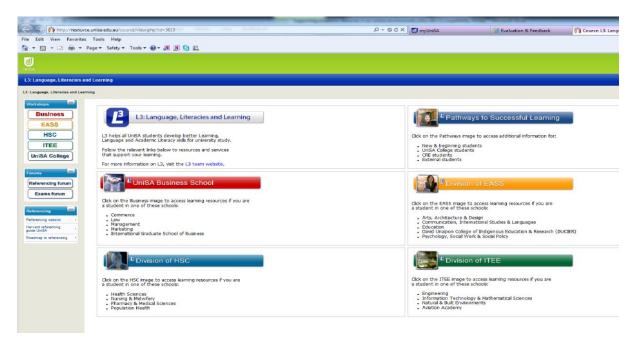


Figure 1. UniSA's L³ Splash Page.

5. Designing the study

The design and approaches undertaken in the study are: (a) to answer the research questions, and (b) draw inferences for policy and practice. The choice of approach depends on the research questions and how the information is going to be used (Patton, 1990). The questions directed the researchers to a so-called "triangulation mixed method design", which allowed the researchers to "simultaneously collect both quantitative and qualitative data, merge the data and use the results to understand a research problem" (Creswell, 2005, p. 514).

Focusing on a selected group to investigate the phenomenon provided a holistic view on the adequacy of the online resources in supporting the development of students' academic literacies and whether the resources were providing students with the scaffolding they required to produce course specific assessment tasks. Data for both aspects of this research study were collected simultaneously and viewed as complementary sources of information. Quantitative data for the present research study was collected through the administration of an online survey. Qualitative data was collected through semi-structured interviews. Although it was possible to collect quantitative data on student engagement with the online resources by tabulating the number of "hits", it was not considered reliable data because the researchers were not able to distinguish between student and non-student access. Additionally, the scope of this study went beyond collecting the number of "hits". The survey was administered to collect more in-depth information. For example, whether the resources met students' needs and whether they helped students understand and complete their learning tasks.

The data for the current study was collected at two time points (Time 1 (T1) - referred to as Occasion 1; and Time 2 (T2) - referred to as Occasion 2) in order to obtain more responses. The response rate at T1 was less than 10 per cent (n = 91). Therefore the researchers felt that there was a need to administer the survey to a second cohort of students (T2; n = 36). Data for T1 was collected in October 2012 and T2 data was collected in April 2013.

Approximately 1000 students were invited to complete a survey created on Survey Monkey on both occasions of the study. Only eight out of the 1000 students who were approached, volunteered to participate in the qualitative phase of the study. Most of the participants who participated in the semi-structured interviews were mature age students. Repeated attempts to involve other students were not successful and the researchers had no choice but to proceed with the investigation. The following themes were explored in the survey, namely, 1) respondents'

awareness of the L³ website, 2) source of information about the website, 3) whether respondents accessed the website, 4) navigability, 5) content, 6) provision of scaffolding and 7) existing gaps. Respondents responded to a five point Likert-type scale of "Strongly Agree", "Agree", "No Opinion", "Disagree" and "Strongly Disagree". The demographics of respondents are presented in Tables 1 and 2. Student contact details were obtained from the Business Intelligence Unit of UniSA. The demographics of respondents for this study was represented by level of study (diploma, bachelor degree, etc.), program level (first year, second year etc.), mode of study (internal, external, mixed mode), students with an access plan (students with disability), residency status (Australian or international student), language background (ESB or NESB) and campus (City campuses, regional, external). The completion rate of the survey significantly decreased on Occasion two (T2) of this study. The researchers agreed that this could be due to factors such as timing and fatigue. The survey was administered during the semester break and students who were on their breaks could have been unmotivated to participate. It is also possible that students were fatigued from completing surveys as it was observed by the researchers that it was a common and regular method employed by the University to collect data.

Table 1. Demographics of Survey Respondents.

Demographics	Response	Perce	entage	Co	unt
		T1	T2	T1	T2
				(n=91)	(n=36)
Current level of study:	University pathway	0.0	3.0	0	1
	Diploma	4.0	0.0	3	0
	Bachelor	70.7	39.4	53	12
	Postgraduate by Coursework	22.7	36.4	17	12
	Postgraduate by Research	2.7	21.2	2	7
Program level	First Year	33.3	24.2	25	8
	Second Year	36.0	36.4	27	12
	Third Year	21.3	18.2	16	6
	Fourth Year or later	9.3	21.2	7	7
Mode of study	Internal	60.0	69.7	45	23
	External	20.0	12.1	15	4
	Mixed mode (internal & external)	20.0	18.2	15	6
Students with an access plan (disability)	Yes	4.8	4.8	3	3
	No	82.5	88.5	52	23
	Not sure	12.7	7.7	8	2
Residency	Australian	66.7	54.5	50	18
	International	33.3	45.5	25	15
Language background	ESB	68.0	51	60.6	20
	NESB	32.0	24	39.4	13
Campus	City West	26.7	20	39.4	13
	City East	22.7	17	24.2	8
	Mawson Lakes	24.0	18	24.2	8
	Magill	20.0	15	12.1	4
	Whayalla	0.0	0	0.0	0
	Mount Gambier	0.0	0	0.0	0
	No campus (enrolled externally)	22.7	17	21.2	7

Table 2. Demographics of Interview Participants.

Demographics	Response	Count (n=8)
Gender	Male	2
	Female	6
Current level of study	Bachelor	2
	Postgraduate by Coursework	5
	Postgraduate by Research	1
Mode of study	Internal	7
	Mixed mode (internal & external)	1
Residency	Australian	3
	International	5
Language background	ESB	2
	NESB	6
Campus	City West	1
	Mawson Lakes	4
	Magill	3

Patton (1990) stated that data from interviews should consist of direct quotations about experiences, opinions, feelings and knowledge. This technique was regarded as central to investigating the adequacy of the online resources and whether they were providing students with the necessary scaffolding to produce the genres of their discipline as this phenomenon could not be observed directly. The interviews enabled the researchers to probe the thinking of interview participants. In this study, individual semi-structured interviews were employed to examine participants' thoughts, opinions and perceptions about the online resources on the L³ website. The semi-structured interviews explored the following themes, namely, 1) the processes students undertook to access resources to complete a particular genre for their study program; 2) the content of the resource and whether it assisted students in completing their assignment; and 3) whether the resource(s) on the L3 website would help students approach their university studies more confidently. Eight students participated in the semi-structured interviews (see Table 2). It should be noted that the researchers were aware that the views of the eight interview participants may not be authoritative or representative of the wider student population. These students were identified from the survey as they had volunteered to participate in the interview by providing their contact details. All but one division was represented in the interview section of the current research study. The researchers failed to get any representation from the Division of Health Sciences despite repeatedly trying to obtain participants for the interview sessions.

Interview participants were given a simulated activity that required them to find resources on the L³ website that would help them complete a report writing assignment. The data collected through the interviews with the eight participants were transcribed, identified, reduced, coded and categorised. The data were classified accordingly to descriptive codes such as demographics, processes undertaken to access the resources, navigability of the website, usefulness of the resources, the scaffolding provided by the resources and participants' perceptions about the resources. Once coded, the data was analysed for emerging themes or patterns (Miles & Huberman, 1994; Richards, 2006; Ryan & Bernard, 2003). The data were initially displayed using matrices (Miles & Huberman, 1994). Subsequently, the interrelations between the data were examined.

6. Results

On both occasions of the study, it was found that there were equally as many students who were aware of the L³ website than those who were not. This was demonstrated by 51 per cent of the respondents who listed that they knew about the website at T1 and 53 per cent at T2. It is worth noting that respondents who were not aware of the online resources were asked to skip Questions 2-6 (how respondents found out about the resources, have they used the resources, responding to the various statements on a five point Likert-type scale, identifying the three most useful resources on the website and listing resources that should be included on the website). Thus at T1 of the study, 50 out of the 91 respondents did not respond to Questions 2-6 and at T2, 17 out 36 respondents skipped the questions. This may have impacted on the response rates. Approximately 54 per cent of the respondents found out about the website from their lecturers and tutors on Occasion 1 of the study. This value decreased nearly in half on Occasion 2 and students became more aware of the L^3 website from promotional material. On Occasion 2, respondents were also finding out about the website from other sources such as the LLAs, LTU, links from their course home page, from peers and the student portal. The use of the online resources increased significantly on Occasion 2 of the study to 72 per cent compared to 59 per cent on Occasion 1. These findings were critical to the whole study as it was important to identify whether students knew about the existence of the L³ website and if they did, how they came to know about it and if they were accessing the resources. The data collected to identify student awareness of the L³ website is presented in Table 3.

Two new response categories (LLA and Link from course home page to L^3) were added to the survey on Occasion 2 of the study. This was based on feedback from the L^3 team and colleagues from the Learning and Teaching Unit. It was found that students were also finding out about the website from these two sources.

Table 3.	Respondents'	awareness of	f the L^3	website.

Statement	Response	Perce	ntage	Count		
		T1	T2	T1	T2	
Awareness of L3 resources on L3 website	Yes	50.5	52.8	46	10	
	No	49.5	47.2	45	17	
Finding out about the online resources	LLA	NA	16.7	NA	3	
	LTU	22.0	16.7	9	3	
	Lecturer/tutor	53.7	27.8	22	5	
	Link from course homepage to LTU	26.8	11.1	11	3	
	Link from course homepage to L3 website	NA	11.1	NA	2	
	From a friend	14.6	11.1	6	2	
	L3 promo material	17.1	22.2	7	4	
	MyUnisa Portal	19.5	16.7	8	3	
Accessing online resources on Div L3 website	Yes	58.5	72.2	24	13	
	No	41.5	27.8	17	5	

6.1. Do the online resources adequately support the development of the students' academic literacies in their discipline areas?

It was found that on Occasion 1 of the study, approximately 96 per cent of the respondents affirmed that the resources were easy to locate with 4 per cent having no opinion. On Occasion

2, this value decreased slightly to 75 per cent of the respondents finding the resources easy to locate. Conversely, 8 per cent of the respondents indicated otherwise. It is pertinent to be aware that this value was impacted by the number of students who reported they used the online resources.

The quantitative data was supported by the qualitative data obtained from the semi-structured interviews. It was found that only participants who had accessed the L³ website in the past located the resources without any problems. Consequently, only RW, a mature age ESB student, studying her degree externally and on part-time basis and JD, another mature age ESB student on an access plan, went directly to the website when they were set the task of locating a resource for report writing. When questioned about the ease of locating the resources, RW said, "Yes, only coz I knew how to look I think" and JD affirmed, "Yes...easily coz there is the direct heading...". Both RW and JD had accessed the website frequently in the past. For respondents who had not logged onto the website as regularly, finding the website was a challenge. BC and JT who were mature age students were observed by the researchers to be struggling to access the L³ website. BC, who was on an Access Plan (disability support), had to be shown how to access the website and responded by stating, "No ... I had forgotten you had to go up to the URL to do it ... I was looking at the library website". BC, who was a 68 year old ESB male, indicated that he often had to deal with lack of memory when trying to obtain resources. JT, another mature age NESB student in his late 50s and who was technologically challenged, indicated,

I have also problem with logging in [sic] a computer because it is something very new to me ... been using it just ... this is just the second year I am getting acquainted to the computer ... so sometimes it is hard but I ... if somebody is beside me, helping me, giving me help to do it ... of course it will be very easy for me.

The other participants, TM, HYF and BA, also emphasised that as first time users, it was not easy to locate the resources from the L^3 website as the labels or button that anchored the resources were confusing.

On Occasion 1 of the study, approximately 83 per cent of the students concurred that the online resources met their learning needs by responding to the statement "Resources meet my demand". Thirteen per cent of the respondents had "No Opinion" and four per cent disagreed with the statement. This value did not change significantly on Occasion 2 with 83 per cent affirming that their learning needs were being met by the online resources. On Occasion 2, although 17 per cent of the respondents had "No Opinion" regarding this statement, none of them disagreed. The data capturing students' perceptions about the adequacy of the resources in supporting the development of academic literacies in their discipline area is presented in Table 4. The interviews confirmed that the participants found the resources to be meeting their learning needs. This can be deduced from the following responses:

Definitely ... I haven't had to do a report as part of my assignment ... the document I was looking gave me a really good format on the layout of the report ... like a practical example (RW)

Well, it is so resourceful because if you don't have any idea of compiling or writing your reports ... if you come and see the tips from here ... it will give you an idea of first of all ... how report look like ... what is a report ... (JT)

The findings demonstrated that approximately 71 per cent of the respondents found the website easy to navigate on Occasion 1. This increased significantly to 82 per cent on Occasion 2. On Occasion 1 of this study, the statistics confirmed that 71 per cent of the respondents found the information on the resources was structured to help their understanding. This value increased considerably on Occasion 2 to 100 per cent. On both Occasions 1 and 2, a majority of the respondents found the content of the resources engaging and appealing with 67 and 63 per cent and 83 and 67 per cent respectively. However, it is worth noting that 25 per cent of the respondents did not find the resources appealing at T2 of the study. All the participants in the interviews agreed that the information in the resource that they had reviewed, was structured well. TM, a mature age, NESB postgraduate student from the Division of ITEE stated,

I'll be frank. When I look at the organisation in terms of the schools, it is nicely organised in that we know that the different schools they have got their own formats of writing [sic].

What TM was referring to was that different programs within the university required production of different academic literacies and genres. Another participant, HYF, a NESB student who was doing an undergraduate degree in BUE, reiterated this sentiment when she highlighted,

Yeah, it was very helpful. Very rich information there. And also tell me about what kind of report for example research one or analyse one [sic]. Yeah it is a lot of information and it really help my direction [sic] to write a report. Currently I have to write a report and I will use this as a guideline when I finish my draft. And start like uh, like fix my, my proper [sic].

Approximately 92 per cent of the respondents indicated that the information on the resources were easy to read on Occasion 1. This value decreased slightly to 75 per cent on Occasion 2. Seventeen per cent of the respondents had no opinion and eight per cent did not agree that the resources were easy to read at T2 of this research study. On whether the instructions on the resources were easy to follow, it was found that 78 per cent of the respondents confirmed that this was the case on Occasion 1 and 75 per cent on Occasion 2.

Table 4. Adequacy of the online resources in supporting the development of academic literacies in students' discipline area.

Statement				P	ercent	age (%)				Co	unt
			T1					T2			T1	T2
	SA	A	NO	D	SD	SA	A	NO	D	SD		
The resources	8.3	87.5	4.2	0.0	0.0	8.3	66.7	0.0	16.7	8.3	24	12
are easy to locate	(2)	(21)	(1)	(0)	(0)	(1)	(8)	(0)	(2)	(1)	Av:4.04	Av:3.50
Resources	21.7	60.9	13.0	4.3	0.0	8.3	74.0	16.7	0.0	0.0	23	12
meet my demand	(5)	(14)	(3)	(1)	(0)	(1)	(9)	(2)	(0)	(0)	Av:4.00	Av:3.92
Easy to	16.7	54.2	20.8	8.3	0.0	8.3	83.3	8.3	0.0	0.0	24	12
navigate	(24)	(13)	(5)	(2)	(0)	(1)	(10)	(1)	(0)	(0)	Av:3.79	Av:4.00
Information	8.3	63.5	16.7	12.5	0.0	0.0	100.0	0.0	0.0	0.0	24	12
structured to help understanding	(2)	(15)	(4)	(3)	(0)	(0)	(12)	(0)	(0)	(0)	Av:3.67	Av:4.00
Links on	13.0	60.9	26.1	0.0	0.0	0.0	91.7	8.3	0.0	0.0	23	12
website reliable	(2)	(14)	(6)	(0)	(0)	(0)	(11)	(1)	(0)	(0)	Av:3.87	Av:3.92
Content	12.5	54.2	29.2	4.2	0.0	0.0	83.3	16.7	0.0	0.0	24	12
engaging	(3)	(13)	(7)	(1)	(0)	(0)	(10)	(2)	(0)	(0)	Av:3.75	Av:3.83
Presentation of	8.3	62.5	25.0	4.2	0.0	0.0	66.7	8.3	25.0	0.0	24	12
content appealing	(2)	(15)	(6)	(1)	(0)	(0)	(8)	(1)	(3)	(0)	Av:3.75	Av:3.42
Information	16.7	75.0	8.3	0.0	0.0	8.3	66.7	16.7	8.3	0.0	24	12
easy to read	(4)	(18)	(2)	(0)	(0)	(1)	(8)	(2)	(1)	(0)	Av:4.08	Av:3.75
Instructions	17.4	60.9	17.4	4.3	0.0	0.0	75.0	16.7	8.3	0.0	23	12
easy to follow	(4)	(14)	(4)	(1)	(0)	(0)	(9)	(2)	(1)	(0)	Av:3.91	Av:3.67
Purpose of	20.8	58.3	20.8	0.0	0.0	0.0	100.0	0.0	0.0	0.0	24	12
resources was clear	(5)	(14)	(5)	(0)	(0)	(0)	(12)	(0)	(0)	(0)	Av:4.00	Av:4.00

On both occasions, approximately 17 per cent of the respondents had no opinion, and four per cent on Occasion 1 and eight per cent on Occasion 2 disagreed with the statement. All the eight participants in the semi-structured interviews suggested that the information on the resources was easy to read. This is can be observed from some of the participants' responses:

In my case, when I look at this one. Report writing. Of course it gives some of the way to write a report. It gives all the requirements. Because there is an overview. The structure of the report. It directs me to writing the report. (BA, NESB male postgraduate)

Yes, because it gives you a clear understanding, outline on how you should structure it in logical order, yeah easy. (JD)

On Occasion 1 of this study, approximately 79 per cent of the respondents stated that the purpose of the resources was clear and 20 per cent had no opinion. On Occasion 2, all the respondents concurred with the statement.

6.2. Do the resources provide students with the scaffolding they require to demonstrate discipline specific academic literacies in the production of course specific assessment tasks?

On Occasion 1 (T1) of the study, approximately 75 per cent of the respondents confirmed that the online resources helped them complete their assignments. Seventeen per cent of the respondents had no opinion and eight per cent of the respondents found that the resources did not help with the completion of their assignment. On Occasion 2 (T2) of the study, it was found that 58 per cent of the respondents concurred with the statement while 42 per cent had no opinion. However, none of the respondents disagreed with the statement at this time point. It was also found that approximately 80 per cent of the respondents found the resources relevant to their assessment tasks on Occasion 1 with 17 per cent having no opinion about the statement. Only four per cent of the respondents disagreed with the statement. On Occasion 2 of the study, it was found that value decreased to approximately 67 per cent respondents confirming that the resources were relevant to assessment tasks. There was an increase in the number of respondents (33 per cent) who had no opinion about the statement. The data capturing students' responses about whether the resources were providing the scaffolding they required to demonstrate discipline specific academic literacies in the production of course specific assessment tasks is presented in Table 5.

Table 5. The capacity of the resources in providing the scaffolding students required to demonstrate discipline specific academic literacies in the production of course specific assessment tasks.

Statement	Percentage (%)								Count			
	T1					T2					T1	T2
	SA	A	NO	D	SD	SA	A	NO	D	SD		
Resources	16.6	58.3	16.7	4.2	4.2	0.0	58.3	41.7	0.0	0.0	24	12
helped with assignment completion	(4)	(14)	(4)	(1)	(1)	(0)	(7)	(5)	(0	(0)	Av:3.79	Av:3.58
Resources relevant to assessment tasks	16.7 (4)	62.5 (15)	16.7 (4)	0.0 (0)	4.2 (1)	0.0 (0)	66.7 (8)	33.3 (4)	0.0 (0	0.0 (0)	24 Av:3.88	12 Av:3.67
Enough resources to help with my learning	16.7 (4)	70.8 (17)	8.3 (2)	0.0 (0)	4.2 (1)	0.0 (0)	58.3 (7)	25.0 (3)	16.7 (2)	0.0 (0)	24 Av:3.96	12 Av:3.42

On whether there were enough resources to help the respondent's with their learning, approximately 88 per cent of the respondents indicated that this was the case on Occasion 1 with eight per cent having no opinion. On Occasion 2 of the study, only 58 per cent of the respondents indicated that there were enough resources to help them with their study, with 25 per cent having no opinion. Conversely, 17 per cent of the respondents identified that there were not enough resources to help them with their learning on Occasion 2.

All the eight participants in the semi-structured interviews affirmed that the online resources have given them more confidence in approaching their university studies, helped in making them better and more successful students, and provided them with better understanding on how to approach their university studies. RW declared, "Yes, I don't know what I'll do without it, has really helped me, being a new student ... didn't know what I was doing, a real life saver". This was reiterated by BC, who was on an Access Plan (disability) when he said, "Yes, it is an aid, senior students need more aids, about 40 per cent in the uni are senior students, don't have much experience writing essays or doing assignments, don't know how to structure sentences or paragraphs." The other participants in the semi-structured interviews, JT, JD, HYF, TM and BA, all agreed that the online resources helped them with the production of their tasks as can be observed from their responses:

Very sure. My first assignment I got a [fail grade], Then I went from a [low level pass] to [high level pass]. I am getting this because of the resources. (JT)

Yes, absolutely, it gets [sic] me good tips and how to get started, it is really helpful. (JD)

Yes, definitely. It is providing that clear guidance in terms of how to go about the literature review. (TM)

Of course it gives some of the way [sic] to write a report. It gives all the requirements. Because there is an overview. The structure of the report. It directs me to writing the report. And getting started from there, I can know how to start writing my report. (BA)

7. Findings and Discussion

In summarising and discussing the findings to this study, answers are provided to the two research questions:

7.1. The adequacy of the resources in supporting the development of discipline specific academic literacies

On both Occasions of this research study, it was found that the online resources on the L³ website were adequately supporting the development of respondents' discipline specific academic literacies. This was confirmed by respondents' responses on the survey and the semistructured interviews. At T1 and T2 of the study, a majority of the respondents on the survey specified that they were currently satisfied with the existing resources on the website and that they could not think of anything in particular that should be included. However, one respondent had suggested that it would be beneficial to have more resources supporting external students. It was possible that students who were studying externally required more discipline specific resources. It was consistently found that at both time points of the study more than 80 per cent of the respondents indicated that the resources met their learning needs. In addition, more than 70 per cent of the respondents indicated that the information on the resources was structured to help their understanding. A majority of the respondents in the survey agreed that the instruction on the resources were easy to follow and the purpose of the resources was clear. This was confirmed by participants' responses in the semi-structured interviews. It is worth noting here that some respondents in the survey highlighted that they did not find the resources appealing. It would be pertinent to examine why this was so as none of the interviewees provided insights about this.

All the participants in the interviews confirmed that the resources on the L³ website were very useful, especially if the students have not produced a particular genre before or were not familiar with its format or structure. The participants also affirmed that the online resources demonstrated the purpose of a genre and how they should be structured so that students could use them as models to produce their own task or assignments. The findings of this study substantiate that the online resources have successfully achieved their aim in scaffolding students through the various stages of academic literacies starting from the very basic level of communicating the purpose and overview to higher levels where students produce the genres themselves. This study also confirms that the online resources on the website were adequately introducing students to the academic literacies of their disciplines.

However, the findings of this study also highlight that the architecture of the L³ website was creating challenges for students accessing the online resources. On Occasion 2 of this study, approximately 25 per cent of the respondents specified that the online resources were not easy to locate on UniSA website. This was confirmed by the majority of the participants during the interviews. It was observed that the participants struggled through the processes of locating the L³ website with many of them initially accessing the library website. These students had to be directed to the website by the researchers. The participants of the study indicated in the interviews that the labels or buttons did not identify the genre-types that were anchored within. Furthermore, the participants highlighted that not many students knew about the L³ website and that it should be promoted more actively. This was confirmed by the findings of the study. Approximately 50 and 47 per cent of the respondents declared that they were not aware about the website on Occasions 1 and 2 of the study.

7.2. Provision of the scaffolding required to demonstrate discipline specific academic literacies in the production of course specific assessment tasks

The findings indicate that more than 75 per cent of the respondents found that the resources helped them complete their assignments, were relevant to assignment tasks, and were adequately scaffolding learning on Occasion 1. This value decreased on Occasion 2 to approximately 60 per cent. At T2 of this study, a large proportion of the respondents did not have an opinion about these statements (25-42 per cent). It is not clear why this is so. However, although this value was high, only four per cent of the students disagreed with the statements on Occasion 1 and none on Occasion 2. One interesting finding that emerged from this study is that although some of the respondents highlighted that there were not enough resources on the website to scaffold the production of discipline specific genres, when asked to specify what other resources should be included, most of the respondents indicated that the website was fine the way it was currently and that the respondents could not think of any specific resources. It could be interpreted that a majority of the respondents found that the resources were scaffolding the production of discipline specific genres. The responses from the semi-structured interviews reiterated this. The eight interview participants concurred that the resources made them feel comfortable about completing their assignments; gave them confidence in approaching their university studies and helped make them better and more successful students.

The interview participants also emphasised that as "novices" to the academic discourse, it was important to have access to step by step instructions on how to produce a particular genre as well as models and examples that could be used to transfer learning. The interview participants also articulated that they printed the resources and kept them in folders so that they could refer to them when necessary. It is possible that the online resources were not only providing the respondents with scaffolding at one point of time but over the period of their studies. For many of the interview participants from ESL backgrounds, the opportunity to have access to the online resources appeared to facilitate learning in a non-threatening environment. These participants suggested that they kept referring to the resources and selected information that would be useful for writing their own assignments. This also seemed to be the case for students with access plans. Some of the interview participants highlighted that their tutors do not explain how the genres should be produced and hence having the online resources were useful. Other

interview participants emphasised that the use of colours to differentiate the different sections was appealing and "easy on the eye", especially for those who wore glasses.

The findings confirm that the online environment is a valuable platform through which students can engage in the development of their academic literacies. This matches the literature which asserts that modes of learning in the 21st century are changing to become more congruent with students' life worlds, and that engaging students in online environments makes learning more authentic (Crook, 2005).

8. Conclusion

The current research study has important implications for policy and practice. Students must acquire the academic literacies of their disciplines. The teaching and learning of academic literacies must be undertaken as an ongoing process. Teaching academic literacies as separate study skills that are removed from content and discourse of the discipline will contribute to poor learning outcomes and student experience. Course administrators must acknowledge that students cannot be expected to engage in the discourse of their discipline without being taught. Students must be socialised into the academic literacies of discipline through models and examples. The scaffolding of academic literacies can be undertaken in an online environment as was indicated by the findings. Students new to the academic discourse valued the scaffolding that they obtained from the online resources that were designed to support discipline specific academic literacies. Supporting the mastery of discipline specific genres via an online environment facilitates learning in a non-threatening context. Moreover, students are able to access the resources at their own convenience and continuously refer to them when required. However, it is important that student and non-student stakeholders are made aware of the existence of the website. For any website to function optimally, communication and promotion should be undertaken rigorously by the design and implementation teams. Furthermore, senior management should ensure that the website is linked to all course homepages and other websites such as the library from which students usually access course resources. This would significantly increase the use of the online resources.

It is pertinent that the architecture of the website is user-friendly and efficiently directs students to the various resources that sit within. Students who are unable to navigate across the website to locate the resources they require may be discouraged from returning to the website in future. It is also possible that students may fail to locate a specific resource because of the architecture of the website. More semi-structured interviews should be undertaken to examine why some of the respondents found the resources as not appealing or meeting their learning needs. It is also worth finding out why a significant proportion of the respondents had "No Opinion" to many of the statements at T2 of this research study. The findings of this study should inform the future development of the website. Other institutions should build on this study to scaffold academic literacies via an online environment.

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