Journal of Academic Language & Learning
Vol. 11, No. 1, 2017, A58-A70. ISSN 1835-5196

Association for Academic Language and Learning

Academic Language Support for At-Risk Students: *REACHing Further*

Ann Dashwood and Jeong-Bae Son

School of Linguistics, Adult and Specialist Education, University of Southern Queensland, Toowoomba, Queensland, 4350, Australia

Email: dashwood@usq.edu.au and jeong-bae.son@usq.edu.au

(Received 8 August, 2016. Published online 26 April, 2017.)

In the Australian higher education context, academic language competence is one of the keys to success for students in their degree programs. Students with underdeveloped communication skills in the relevant discourse community are at risk of not meeting minimum standards in their university courses. *REACH* (Retention – English for Academic Completion Help) is a set of academic language modules embedding relevant language strategies into course content related to course assessment. It was developed at an Australian university for students at risk of not continuing their participation through failure in a first-year course. This article outlines the *REACHing Further* stage of the *REACH* project and presents data collected for part of the evaluation of the *REACH* approach while discussing the distinctive contextual academic language support in the academic disciplines. *REACHing Further* increased accessibility to the *REACH* modules online and provided an online facilitator. This article reports that those students who were engaged with the *REACH* modules generally valued the support and expressed the view that they would recommend others to participate in future. Although the overall engagement by the identified target group was low compared with the mainstream students in the courses selected, examiners and tutors of the target courses indicated that the *REACH* modules were well linked to the course materials and suggested that students should use them more actively. It is recommended that a more interactive, systematic and personalised approach needs to be attractively presented to the target groups and individuals while also researching effective ways of offering academic language support.

Keywords: Academic language strategies, at-risk students, retention, English for academic purposes, academic writing, online resources.

1. Introduction

The university environment in Australia is expected to provide learning outcomes that incorporate generic skills applied in the subject disciplines in each course for all students, irrespective of personal context and means of entry to the university (TEQSA Act 2011, 2015). The requirement of language competence inherent in academic disciplines cannot be taken for granted, yet it makes strong demands on the level of scholarship required of students to complete courses in their degree programs. With a recognition of the importance of academic English language proficiency, levels of unsatisfactory performance by students across disciplines has initiated a shift in orientation not only to the provision, but also to the outcomes of in-course academic support.

REACH (Retention – English for Academic Completion Help) is a program of online modules of academic language strategies providing self-support to students early in their courses as progressive steps towards successful completion of their university courses. Originally developed at the University of Southern Queensland (USQ), the *REACH* project consists of academic English strategies embedded in discipline-specific courses (Dashwood, Dickson, & Harmsworth, 2016). By engaging in *REACH*, at-risk students are guided in their use of academic English skills in selected disciplines. With strategic critical skills of language use (Larsen-Freeman & Long, 1991) for academic purposes, students should become more familiar with academic expectations and more autonomous in their management of information. Researchers agree that an embedded model, in which skills are developed as an integral part of the study program (Wingate, 2006), is more effective than generic skills training as a means of guiding students into the "secondary discourses" (Gee, 2015, p. 95) of university.

REACH adopted the mantra of "Read, Think, Write, Share" (adapted from Brandt, 2009) and a sequenced approach of preparation, presentation, practice and evaluation, which is an adaptation of the cognitive language strategies model developed by Chamot and O'Malley (1987). As outlined in Figure 1, each *REACH* module presents strategies to be applied specifically to course assessment items. The format of actions follows a sequence of reading critically, using academic language in making notes, and writing academically to communicate effectively in the discipline. The mantra "Read, Think, Write, Share" was used as a mnemonic throughout the *REACH* program, as a recursive reminder to students of this habit-forming communication skills strategy (Dashwood, Dickson, & Harmsworth, 2016).

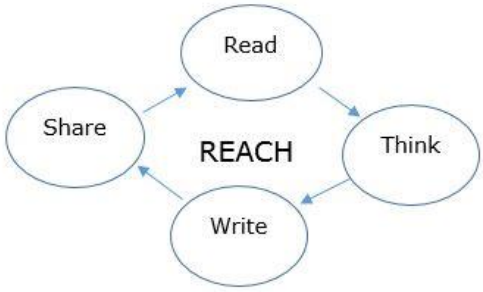

Figure 1. The *REACH* mantra repeated as a mnemonic in each module.

REACHing Further is a subsequent project with online enhancements of *REACH* undertaken in response to the need for extra academic support for at-risk, low socio-economic status (SES) and non-English speaking background (NESB) students. *REACHing Further* involved collaborating with course examiners and tutors, integrating academic English language activities into the targeted first-year courses and aligning language skills with the genre of specific assessment tasks. It also required identifying at-risk students in the courses, tracking their academic performance, and monitoring their academic writing in the course over the semester. In outlining the *REACHing Further* project, this article presents the results of part of the evaluation of the project and discusses academic language support in higher education.

2. Academic language support

The need for additional academic language support to students at risk of not completing their degree courses at universities has been widely highlighted in the literature. Early studies focussed on the language needs of English language learners from traditionally non-English speaking backgrounds. Griffiths (2003) identified a positive correlation between course level and reported frequency of language learning strategy use. In a study involving 348 students in a private language school in New Zealand, language learning strategies were reported as more frequently used by

advanced students than by elementary students, particularly in interactions with other students, in vocabulary, in reading, in tolerating ambiguity of language forms, and in the use of resources.

A number of studies support the idea of linking the development of academic language skills to discipline-specific academic activities and/or assessment tasks in particular. For example, Brooman-Jones, Cunningham, Hanna, and Wilson (2011) reported on a case study of embedding academic literacy through the integration of assessment into two discipline subjects in a business diploma. The results of a simple questionnaire with 79 students indicated that the students were positive (76-86%) about the value of the integrated assessment. Similarly, Harris and Ashton (2011) explored integrated and embedded learning support in a core management unit of the MBA at Edith Cowan University over a period of three semesters. The support involved the services of a learning advisor, curriculum design, assessment renewal, and class presentations. They claimed that the approach to embedding language and academic skills was successful and would be extended to other core units.

Attempts at weekly one-hour tutorials have been tried by Dunworth and Briguglio (2010) in their pilot project called Starting University Confidently and Competently English Support Scheme (SUCCESS). Out of 287 students who were identified as requiring additional English language support and who finished a final writing task, 45 students completed a survey and generally indicated that the SUCCESS intervention was valuable, but the final writing test was stressful. Johnston (2011) has described a first-year student support strategy called Supporting Academic Success (SAS), which was introduced by academic language and learning staff at the University of South Australia. Based on data collected from retention and success rates, telephone interviews, online surveys and staff feedback, she argued that the early intervention had only a minor impact on marks, but was effective in improving retention and success.

Kennelly, Maldoni, and Davies (2010) examined a discipline-based program embedded into a first-year unit at the University of Canberra. The discipline-specific program was named Unit Support Program (USP) and consisted of a one-hour workshop held each teaching week. Their analysis of student attendance, assessment data, student evaluations and reflection of peer teaching practices indicated that the program improved student learning outcomes, yet many at-risk students did not attend the USP workshops. Concerning non-attendance at the USP program, Kennelly and Tucker (2012) compared irregularly attending students with regularly attending students and identified aggregated reasons for non-attendance given by their students to be: paid employment; lack of motivation; inability to understand teachers and classmates; possibility of eventually passing without attending the USP; and delays in starting the semester work.

In an attempt to improve student participation and to provide support to low SES background students, Thies (2012) embedded academic literacies into a core course in a first-year unit in Health Sciences at Deakin University. She recommended a whole-of-institution approach to embed academic literacies in curriculum renewal as implemented in Harper and Vered (2017). In a different context, Wingate, Andon, and Cogo (2011) evaluated an academic writing intervention offered to first-year undergraduate students in an applied linguistics program through the analysis of data from teacher notes, a student questionnaire, interviews with students, samples of students' scripts and feedback comments of teachers. They reported that overall both students and teachers perceived the embedded writing instruction positively and that the most valued aspects by the students was the assessment feedback.

In another discipline, Mort and Drury (2012) described and evaluated a discipline-specific online report writing resource for undergraduate science and engineering students. The resource was titled "Write Reports in Science and Engineering" (WRiSE) and was presented as a website. It contained nine modules from seven disciplines, used animated explanations, interactive quizzes and exercises with feedback, and edited audio interviews. The results of their evaluation show that WRiSE users attained higher marks overall than non-users in report assignments. Similarly, Nallaya and Kehrwald (2013) looked into the adequacy of a Language Literacies Learning (L^3) website initiated by the University of South Australia and the scaffolding of academic literacies

via the Moodle-based website designed to introduce associated academic literacies through models and examples. They collected data from an online survey and semi-structured interviews and concluded that the online platform was valuable for students in the development of their academic literacies, although there were issues of raising students' awareness of the existence of the website and making the architecture of the website more user-friendly and efficient to offer the range of resources.

The growing literature suggests that students who are strategic in their use of academic skills utilise online resources that they perceive are relevant to their coursework and assessment. Conversely, at-risk students with low academic performance from SES and NESB backgrounds and weak academic literacy skills are less strategic on average in engaging with support designed to complement the reading and writing demands of their courses. Additional research is therefore overdue to find the means of attracting at-risk students to seek out resources available to them at any time they require and for them to become aware of the connection between the use of supporting resources such as the guiding *REACH* modules and the advantages of accessing them routinely.

3. The study

3.1. Aims

This study aimed to evaluate the *REACHing Further* project by analysing student engagement and experience with the *REACH* modules for developing their writing skills and enhancing their performance over a semester (15 weeks). It also investigated the views of examiners and tutors on the role of the *REACH* modules in supporting students' development of relevant academic English strategies in three targeted courses. As a basis for the evaluation of the project, data were collected within the framework of mixed methods research.

3.2. Participants in *REACHing Further*

Out of 1048 students enrolled in the three targeted courses with highest attrition in their separate program disciplines (ENG1002 Introduction to Engineering and Spatial Science Applications; LAW1101 Introduction to Law; and MGT1000 Organisational Behaviour), 145 students were invited by the project team through emails and phone calls to participate in the *REACHing Further* project in Semester 2, 2015. The process involved identifying NESB, low SES and students new to the culture of university, all with a Grade Point Average (GPA) of 4 or less.[1] Among the 145 students, 10 students dropped their courses during the semester and only 24 students (13 females and 11 males; mean age 25, ranging from 18 to 45 years) accepted the invitation and filled in a consent form. Their participation involved reading the *REACH* modules each week of the semester and participating in academic language activities related to their assignments; having their writing on assignments analysed for academic proficiency; providing their views on the additional academic support through a questionnaire; and, for some on-campus students, participating in interviews to respond to questions about their academic needs and use of the *REACH* modules. The students consisted of 6 native speakers of English at-risk of failing, 4 native speakers of Arabic, 2 native speakers of Punjabi and 12 native speakers of other different languages. Although several attempts to encourage and increase student participation were made, the targeted at-risk students' participation rate (17.8%) was very low. Together with the on-campus students, several teachers who were involved in the teaching of the three courses and an online facilitator were also invited to participate in interviews.

[1] The University uses a 7-point grading scale where 7 is the highest grade, 4 is the lowest passing grade, and grades of 1, 2 and 3 are all failing grades.

3.3. Materials and procedures

REACH is ten online modules of strategies and discussion forums with a facilitator who responds to students' questions online. Academic English strategies are embedded into the undergraduate course content and presented in modules which are designed, written and implemented to assist students to complete their assessment items successfully. Although not part of this evaluation, the project team also wrote scripts designed for tutors and created four-minute video clips of strategic features of the updated *REACH* modules. The clips offered tutors a demonstration of exemplars of the *REACH* strategies in action in which a tutor engaged two students with a targeted academic strategy using the metalanguage of learning by questioning, sharing and evaluating.

The modules were available online within each course's Moodle site (called StudyDesk) to every student in the target courses, while at-risk students were specifically invited to use them. For the course offerings during the project period, the *REACH* material was updated in line with the course assessment tasks for the Semester 2, 2015 teaching period and placed on the targeted course StudyDesks by the Course Examiners. Students therefore had 24/7 access to the modules and one hour per week of online facilitation was added to the project to provide additional assistance in reading comprehension, writing and oral presentation tasks associated with the assessment tasks.

At the beginning of the semester, the project team contacted and invited the students to the *REACHing Further* project and to its online modules. During the semester, the online facilitator monitored the students' engagement with the *REACH* modules and responded to students' questions. At the end of the semester, five types of data were collected from students:

1. an online questionnaire containing items on academic language skills and strategies;
2. samples of assignment writing;
3. record of online engagement with the *REACH* materials;
4. academic performance measured by grade point average; and
5. interviews with course examiners, tutors, the online facilitator and on campus students.

4. Results

4.1. Online questionnaire

An open invitation to participate in an online questionnaire was sent out to all 145 identified at-risk students. The questionnaire consisted of four sections: Section 1 – biographical information; Section 2 – self-rating general academic skills; Section 3 – self-rating writing competence; Section 4 – scale of importance of particular academic strategies in the *REACH* modules; Section 5 – open responses to types of academic support expected in *REACH*. Twenty-three students from the three courses (13 females and 10 males; mean age 33.7, ranging from 19 to 51 years) completed the online questionnaire. They consisted of 11 native speakers of English, 3 native speakers of Hindi, 2 native speakers of Chinese, 2 native speakers of Vietnamese and 5 native speakers of other languages. In the self-ratings of language and academic skills, most students indicated that the levels of their English proficiency, academic study skills, academic reading skills, academic writing skills and digital literacy were acceptable, good or very good. In another question asking whether they had a plan to address problems in their writing, interestingly, 13 students (56.5%) indicated that they were uncertain and 4 students (17.4%) indicated their disagreement, suggesting they had no plan.

Table 1 shows that the students generally considered writing skills to be more important than reading and presentation skills. In line with the importance of assignments, reading the assignment question and knowing how to do the tasks were also considered very important by 17 students (73.9%) and important by 5 students (21.7%).

The results of the students' responses to their overall experience with the *REACH* modules are shown in Table 2. The average ratings of their responses ranged from 3.2 to 3.7, indicating a

moderate level of uncertainty tending towards general agreement that there were benefits derived from the *REACH* modules for specific purposes, particularly with Items 1, 2, 3 and 4. To the first statement (Item 1), "It was valuable to have the *REACH* modules," for example, 13 students (56.5%) agreed/strongly agreed, while 7 students (30.4%) were uncertain. The second statement (Item 2), "It was beneficial to participate in the *REACH* project", generated similar responses, where 12 students (52.2%) agreed/strongly agreed and 9 students (39.1%) were uncertain.

Table 1. Responses to the importance of skills and strategies (N = 23).

	Very Important	Important	Neither Important nor Unimportant	Unimportant	Very Unimportant
Reading the assignment question and knowing how to do the tasks	17 (73.9%)	5 (21.7%)	1 (4.4%)	0 (0.0%)	0 (0.0%)
Knowing the meaning of the key terms in the module	12 (52.2%)	10 (43.5%)	1 (4.4%)	0 (0.0%)	0 (0.0%)
Reading fast	2 (8.7%)	6 (26.1%)	10 (43.5%)	5 (21.7%)	0 (0.0%)
Reading for accurate meaning	6 (26.1%)	15 (65.2%)	1 (4.4%)	1 (4.4%)	0 (0.0%)
Writing useful notes from the readings and lectures	10 (43.5%)	11 (47.8%)	1 (4.4%)	1 (4.4%)	0 (0.0%)
Writing a good paragraph	12 (52.2%)	10 (43.5%)	0 (0.0%)	1 (4.4%)	0 (0.0%)
Writing my assignment in a logical sequence	12 (52.2%)	9 (39.1%)	1 (4.4%)	1 (4.4%)	0 (0.0%)
Designing my own presentation	8 (34.8%)	12 (52.2%)	2 (8.7%)	1 (4.4%)	0 (0.0%)
Making a presentation in a group	3 (13.0%)	5 (21.7%)	8 (34.8%)	4 (17.4%)	3 (13.0%)
Summarising main ideas and key points	9 (39.1%)	14 (60.9%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Remembering how to use a formula or recommended method in a test	12 (52.2%)	9 (39.1%)	1 (4.4%)	1 (4.4%)	0 (0.0%)
Studying effectively	10 (43.5%)	12 (52.2%)	1 (4.4%)	0 (0.0%)	0 (0.0%)

Table 2. Students' responses to items on the *REACH* modules (*N* = 23).

	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree	Average rating[a]
1. It was valuable to have the *REACH* modules.	1 (4.4%)	2 (8.7%)	7 (30.4%)	6 (26.1%)	7 (30.4%)	3.7
2. It was beneficial to participate in the *REACH* project.	1 (4.4%)	1 (4.4%)	9 (39.1%)	5 (21.7%)	7 (30.4%)	3.7
3. The *REACH* modules have helped me to develop my academic language skills.	1 (4.4%)	2 (8.7%)	8 (34.8%)	5 (21.7%)	7 (30.4%)	3.4
4. The *REACH* modules were helpful in doing the course assignments.	1 (4.4%)	2 (8.7%)	8 (34.8%)	4 (17.4%)	8 (34.8%)	3.7
5. The contents of the *REACH* modules were easy to understand and follow.	0 (0.0%)	3 (13.0%)	10 (43.5%)	3 (13.0%)	7 (30.4%)	3.6
6. It was helpful to have an online facilitator.	0 (0.0%)	1 (4.4%)	10 (43.5%)	7 (30.4%)	5 (21.7%)	3.7
7. The *REACH* modules and activities met my expectations.	0 (0.0%)	4 (17.4%)	10 (43.5%)	3 (13.0%)	6 (26.1%)	3.5
8. The academic language and learning support I have received has motivated me to continue to study.	1 (4.4%)	3 (13.0%)	10 (43.5%)	5 (21.7%)	4 (17.4%)	3.3
9. My academic English has been improved as a result of the *REACH* modules and activities.	2 (8.7%)	4 (17.4%)	7 (30.4%)	7 (30.4%)	3 (13.0%)	3.2
10. Overall, I am satisfied with the *REACH* project.	1 (4.4%)	3 (13.0%)	8 (34.8%)	6 (26.0%)	5 (21.7%)	3.5

[a] Calculated using Strongly Disagree = 1; Disagree = 2; Uncertain = 3; Agree = 4; Strongly Agree = 5.

The questionnaire also contained six open-ended questions. The first question asked the students what aspects of their academic English skills they found the most challenging; 14 students out of the 23 students mentioned writing skills, while other students mentioned several other skills such as speaking, paraphrasing and understanding context. The second question asked which modules in the *REACH* program were the best for them to participate in. Their responses included assignment and exam modules (5 students), writing and structuring paragraphs (3 students) and other

modules (1-2 students each). On the other hand, the students' responses to the third question asking what they did not like about the *REACH* program included "Nothing" (9 students), "Too much content" (4 students), "Not really helpful for assignments" (2 students) and other individual comments (1 student each). When the students were asked whether they thought that academic language support such as the *REACH* program is important to the success of their study, 16 out of the 19 students who responded to the fourth question indicated "Yes" and generally pointed out that the academic language support helped them understand and improve the writing skills they regarded as being very important in doing assignments. Through the fifth question, they also indicated that they would recommend the *REACH* program to other students. For example, one student made the following comment: "Definitely to people who are struggling with the language and who are not familiar with what is required from them as they either are out of touch with academic writing or have grown up in a different educational environment to what is required in Australia." Another student also wrote: "I recommend this to all to the current students and future students." Seven students responded to the question inviting further comments and showed their appreciation for the support and the *REACH* program.

4.2. Assignment writing samples

Nineteen students submitted writing assignments (although 24 students participated in the program, 5 failed to submit their writing assignments). These assignments were assessed using a marking rubric adapted from Dunworth and Briguglio (2010). The rubric had four marking criteria: task fulfilment; organisation, coherence and cohesion; grammar and vocabulary; and mechanical accuracy (e.g., spelling, punctuation). The students' first and final writing assignments in the semester were profiled by three markers. The average mark of the 19 students was 3 (out of 5) on all criteria on both writing assignments. In other words, there was no change in the scores and no noticeable improvement in their writing profiles over the short period within the semester.

4.3. Online engagement

The online facilitator created and facilitated online discussion forums and monitored students' online engagement with the *REACH modules*. Table 3 shows the average number of site hits per student and indicates that the students' overall participation rates were low and the at-risk students' average hits were lower than the non-at-risk students in two of the three courses.

Table 3. Average number of hits per student visiting the *REACH* site.

	Participants (at-risk students)			Non-participants (non-at-risk students)		
	Total number of hits	Number of students	Average hits per person	Total number of hits	Number of students	Average hits per person
ENG1002	19	6	3.1	543	140	3.9
LAW1101	62	8	7.8	1787	293	6.1
MGT1000	23	5	4.6	625	113	5.5

4.4. Academic performance

All at-risk students who had submitted the consent form passed the courses that were supported by the *REACH* program. Among those 24 students, only 9 students had a registered GPA at the beginning of the semester. The other 15 students were not selected in the sample reported in Table 4 because they were newcomers to university study in Semester 2 and therefore did not have a record of fail grades when the *REACH* support commenced in the three targeted courses. Table 4 shows that the 9 students received passing grades of 4, 5 or 6 (out of 7) in the course supported by *REACH*. It also shows that the students' final GPAs are overall higher than their initial GPAs, except one student (Student #9) with a slightly lower final GPA. The average of the initial GPAs was 3.00, while the average of the final GPAs was 3.63.

Table 4. Course Grades and Grade Point Averages (GPAs).

Student #	Gender	Age	Course Grade[a]	Initial GPA	Final GPA
1	Male	20	4	1.5	2.13
2	Female	19	4	1.68	2.22
3	Female	17	4	2.33	3.21
4	Female	27	6	3.83	3.93
5	Male	19	5	3.5	3.72
6	Female	18	5	3.63	4.86
7	Male	30	4	3.79	5.33
8	Male	23	4	2.75	3.5
9	Female	19	4	4.0	3.81

[a] Course grade: 7 = High Distinction; 6 = Distinction; 5 = Credit; 4 = Pass; 3 or less = Fail.

4.5. Interviews

Semi-structured interviews were conducted with three on-campus students, three course examiners, four tutors and one online facilitator. The on-campus students showed a lack of familiarity with the *REACH* materials and said that they only used the materials for specific information on how to solve an assessment item or prepare for an exam. A quick solution to the content of the discipline often took priority over developing the communication skills involved. This finding confirms the Devlin et al. (2012) advice that recognised how time poor at-risk students report they are. Academic language support that is not mandatory appears generally to be accessed by competent students who actively seek effective strategies. Those who are struggling with content may need additional guidance to work through the strategies that are offered before they recognise any longer term benefits in the course and in their studies overall.

The course examiners were highly supportive of the *REACH* modules. Two course examiners relied on the *REACH* modules for providing students with a reference guide to the academic language skills that were not explicit in their course materials. The examiner of the Engineering course identified that "the best part of *REACH* is targeting the language in the question and deconstructing meaning clearly for the students as it relates directly to the course content and dovetails into the assessment". He claimed that academics do not have time to demonstrate as well as *REACH* does how to clarify "technical words, build vocabulary, infer meaning in the readings". He also said, "I would get the tutors to use the videos to introduce the academic language strategies concepts." Similarly, the examiner of the Business course stated, "*REACH* helped me to know how important scaffolding is; also how to break down the skills of report writing of a case study." She said that she had adjusted the organisation of the course using "the *REACH* pack of how to unpack assignment tasks, to be discerning, to make judgements from readings, to self-assess, to reflect".

The tutors expressed the view that there was a strong link between the course materials and the *REACH* modules and it would be of benefit to keep the *REACH* modules closely integrated into the course. An Engineering tutor described *REACH* as a "support system on the StudyDesk: that's important and it runs in parallel with the course". She added, "It's a comfort for diligent students to refer back to. One of my mature-aged ESL students used all sections of *REACH* because she had to reset her whole way of processing English from her first language in setting out her Engineering problem." Another Engineering tutor said, "The fact that it was targeted to each activity I think was good because it did allow people to pick and choose, so it does mean they can pop in and out … if they're particularly struggling to process how to approach an assignment they can

just target that. So I do like that aspect of it." The tutors were also concerned about the challenge of getting students to participate in activities that are neither readily visible to access nor assessed. Their observations are supported by the following comment by a Law tutor: "Sometimes we overrate the online. These students are online all the time, but they aren't online on StudyDesk. They're online on Facebook, movie reviews, and all the rest of the stuff … I don't see them on StudyDesk that much."

The online *REACH* facilitator pointed out that general engagement with the *REACH* forums was very low, although a number of students downloaded the *REACH* modules. She reported that she had tried to communicate with the students (e.g., notifying them of the uploading of new *REACH* modules every time) but there were few contacts and responses from them. She also felt that most students wanted a quick fix and immediate success only on an assessment task, so they opened a module and scanned for information that would help them address the specific task right then and there, and then moved on. Her suggestions for improving engagement included the setting up of a *REACH*-specific StudyDesk and the provision of online sessions for the students to come along and bring questions to the facilitator.

5. Discussion

To evaluate the effectiveness of the *REACH* modules, the study investigated data on student uptake, online engagement, written assignments, questionnaire responses, interview responses and academic performance of the target students. The results of the study indicate that the at-risk students' overall participation rates and engagement with the *REACH* activities were low, although these students were frequently encouraged by the project team to interact. This finding supports other studies reporting that those who most need academic language support tend not to attend voluntary sessions (Baik & Grieg, 2009; Harris & Ashton, 2011; Kennelly, Maldoni, & Davies, 2010; McKauge, et al., 2009). It raises the question of how to improve engagement of at-risk students so that they can get direct benefit from the additional strategic academic language support. In line with this, there seems to be a need to reposition the *REACH* modules on StudyDesk, the teaching and learning space for all students. If the modules were easier to find, it is possible that at-risk students who actively respond to the initial invitation to participate would then be less likely to disengage early in the course.

Academics and teachers of discipline content tend not to analyse the academic English proficiency required by students to read and engage with their course materials. There is an overall expectation that students can read the disciplinary content, that they can comprehend the concepts and duly apply them at a sufficiently high level to effectively communicate responses to tasks in each specific disciplinary field. Yet the text and audio-visual resources in course materials are presented in a form of Standard Australian English commonly outside the range of social English users. Students are therefore underprepared for the academic discourse of even the first year of an undergraduate course, a period when students are most at risk of not engaging with the academic language sufficiently meaningfully to attain a passing grade.

It is not uncommon for low SES students to enter higher education without prior acquaintance with academic language and discourse, as Priest (2009) observed. Further, when confronted by unfamiliar academic discourse in the language of higher education, a student's lack of a sense of belonging (Hutchings 2006) can result in a disconnection from relevant sources of support, rather than embracing them. Nevertheless, most students in this study tended to think that they had good English proficiency and academic writing skills, even though their GPAs were low. This might be a reason for them not seeking out academic English strategies that comprise activities in the *REACH* modules. It suggests the need for increasing their awareness of the benefits of programs such as *REACH* and developing effective ways of guiding them to an academic writing circle in order to assist them to prepare, organise and write their assignments.

Regarding the value of the *REACH* modules, as indicated by the mean rating of 3.7 (out of 5) in their responses to the questionnaire on the usefulness of having *REACH* available, the majority of the respondents agreed that it was valuable, helpful and beneficial to have the *REACH* modules

available to all students. They also indicated that academic language support such as the *REACH* program is important to the success of their study. This supports the idea of a discipline-based approach to academic and language development (e.g., Brooman-Jones et al., 2011; Harris & Ashton, 2011; Kennelly, Maldoni, & Davies; 2010; Thies, 2012). As online academic language support, the *REACH* program started with disciplinary-embedded academic language modules for first-year students in the Schools of Commerce and of Engineering in which the Course Examiners were experts in their subject areas rather than in academic language strategies for communication. With further interest from other disciplines such as Health and Nursing, similar content-based language strategies could be implemented.

Those students who participated in the interviews generally had limited experience with the *REACH* modules, but considered the modules were useful when course teachers required them to focus on specific strategies. This required a level of commitment from the students to search for, locate and then apply the strategies. Many perceived that the online support took too long to guide their study approach and to hold their interest. Without the social presence of a guiding *REACH* tutor, a student's urgent demand for a quick answer to an often ill-conceived problem immediately reduced the potential effectiveness of the strategy itself. Students' ability to evaluate the skill independently was sporadic, more like a "scatter-gun" approach than a consistent application to the task at hand.

The course examiners and tutors showed their support for the *REACH* approach and recommended that at-risk students use the modules. The online facilitator who monitored the students' engagement with the *REACH* module on their course StudyDesks during the semester confirmed the advantages to those students who used the embedded language strategies; however, the low level of online engagement of at-risk students needs to be addressed. It was encouraging to see that all students who agreed to participate in the *REACH* project and at some stage tapped into the *REACH* modules passed the course at the end of the semester.

Limitations of the study relate to a low uptake by at-risk students, particularly those at the threshold of a pass or fail. Thus, it is recommended that more effort be made to increase students' awareness of academic support programs, to encourage their engagement with the modules, to guide their use of the program and to monitor their learning outcomes. Specifically, it is also recommended that a measure of the efficacy of programs like *REACH* would take the form of assessing the impact of regular contact through short face-to-face mentoring sessions on how to use online modules most effectively.

6. Conclusion

The *REACHing Further* project has identified academic English strategies that were implicit in the learning tasks of the selected first-year courses and then through the *REACH* modules were made explicit by embedding them in discipline-specific content. For the future, it is envisaged that the *REACH* design will provide course examiners with a digitally enhanced visible online social presence of relevant reading and writing strategies for them to embed into their subject course content.

Although there was an issue with participation rates, students who were at risk of failing courses, who became engaged with the *REACH* modules online found success more often than those who made less use of the modules. The students generally valued the academic language support and expressed the view that they would recommend other students to participate in the program in the future. The examiners and tutors of the target courses also indicated that the *REACH* modules linked well with the course materials and that the students should use them more actively. However, student engagement needs to be improved through a more interactive, systematic and personalised approach online. With an increased understanding by the course examiners of students' needs and engagement with embedded academic communication support, it is hoped that students' use of programs such as *REACH* will have the effect of improving student progression and retention rates. It is also recommended that long-term benefits for students' academic outcomes be investigated through longitudinal studies of those who engage with similar online strategies.

In addition, there is potential to develop the embedded *REACH* approach university-wide, enhancing course design to improve the academic language capability and communication skills of at-risk students more broadly.

Acknowledgements

The *REACHing Further* project was funded by the Higher Education Participation Programme (HEPP) Grant though the Office of Social Justice at the University of Southern Queensland.

References

Baik, C., & Grieg, J. (2009). Improving academic outcomes of undergraduate ESL students: The case for discipline based academic skills programs. *Higher Education Research and Development, 28*(4), 401-416.

Brandt, C. (2009). *Read, research and write: Academic skills for ESL students in higher education*. Los Angeles: SAGE.

Brooman-Jones, S., Cunningham G., Hanna, L., & Wilson, D. N. (2011). Embedding academic literacy – A case study in Business at UTS: Insearch. *Journal of Academic Language & Learning, 5*(2), A1-A13. Retrieved from http://journal.aall.org.au/index.php/jall/article/view/133/104

Chamot, A. U., & O'Malley, J. M. (1987). The cognitive academic language learning approach: A bridge to the mainstream. *TESOL Quarterly, 21*(2), 227-249.

Dashwood, A., Dickson, L., & Harmsworth, S. (2016). Embedding academic language strategies in university courses: The *REACH* approach. In S. O'Neill & H. van Rensburg (Eds.), *Global language policies and local educational practices and cultures* (pp. 280-297). Blue Mounds, WI: Deep University Press.

Devlin, M., Kift, S., Nelson, K., Smith, L., & McKay, J. (2012). *Effective teaching and support of students from low socioeconomic status backgrounds: Practical advice for teaching staff*. Australian Government Office for Learning and Teaching. Retrieved from http://www.lowses.edu.au/assets/Practical%20Advice%20for%20Teaching%20Staff.pdf

Dunworth, K., & Briguglio, C. (2010). Collaborating across boundaries: Developing a cross-departmental approach to English language development in an undergraduate business unit. *Journal of Academic Language & Learning, 4*(1), A13-A23. Retrieved from http://journal.aall.org.au/index.php/jall/article/view/117/85

Gee, J. P. (2015). *Literacy and education.* New York: Routledge.

Griffiths, C. (2003). Patterns of language learning strategy use. *System, 31*(3), 367-383.

Harper, R., & Vered, K. O. (2017). Developing communication as a graduate outcome: Using 'Writing Across the Curriculum' as a whole-of-institution approach to curriculum and pedagogy. *Higher Education Research and Development, 36*(4), 688-701. doi:10.1080/07294360.2016.1238882

Harris, A., & Ashton, J. (2011). Embedding and integrating language and academic skills: An innovative approach. *Journal of Academic Language & Learning, 5*(2), A73-A87. Retrieved from http://journal.aall.org.au/index.php/jall/article/view/158/110

Hirsh, D. (2007). English language, academic support and academic outcomes: A discussion paper. *University of Sydney Papers in TESOL, 2*(2), 193-211.

Hutchings, C. (2006). Reaching students: Lessons from a writing centre. *Higher Education Research and Development, 25(3),* 247–261.

Johnston, H. (2011). ALL taking a lead: Enabling first year persistence and success. *Journal of Academic Language & Learning, 5*(2), A145-A157. Retrieved from http://journal.aall.org.au/index.php/jall/article/view/152/119

Kennelly, R., Maldoni, A., & Davies, D. (2010). A case study: Do discipline-based programmes improve student learning outcomes? *International Journal for Educational Integrity, 6*(1), 61-73.

Kennelly, R. M., & Tucker, T. (2012). Why do "at risk" students choose to attend or avoid specific support programs: A case study of student experience at the University of Canberra. *Journal of Academic Language & Learning, 6*(1), A103-A116. Retrieved from http://journal.aall.org.au/index.php/jall/article/view/132/140

Larsen-Freeman, D., & Long, M. H. (1991). *An introduction to second language acquisition research*. New York: Longman.

McKauge, L., Emmerton, L., Bond, J., Steadman, K., Green, W., Sweep, T., & Cole, M. (2009). An initiative to improve the professional communication skills of first-year pharmacy students. *Proceedings of the 32nd HERDSA Annual Conference* (pp. 284-295). Retrieved from http://herdsa.org.au/system/files/HERDSA2009_McKauge_L.pdf

Mort, P., & Drury, H. (2012). Supporting student academic literacy in the disciplines using genre-based online pedagogy. *Journal of Academic Language & Learning, 6*(3), A1-A15. Retrieved from http://journal.aall.org.au/index.php/jall/article/view/173/151

Nallaya, S., & Kehrwald, J. (2013). Supporting academic literacies in an online environment. *Journal of Academic Language & Learning, 7*(2), A79-A94. Retrieved from http://journal.aall.org.au/index.php/jall/article/view/259/171

Priest, A. (2009). 'I have understanding as well as you': Supporting the language and learning needs of students from low socio economic status backgrounds. *Journal of Academic Language and Learning 3*(3), A1-A12. Retrieved from http://journal.aall.org.au/index.php/jall/article/viewArticle/95

Tertiary Education Quality and Standards Agency (TEQSA) Act 2011. (2015). Higher education standards framework (threshold standards). Retrieved from https://www.legislation.gov.au/Details/F2015L01639

Thies, L. C. (2012). Increasing student participation and success: Collaborating to embed academic literacies into the curriculum. *Journal of Academic Language & Learning, 6*(1), A15-A31. Retrieved from http://journal.aall.org.au/index.php/jall/article/view/127/126

Wingate, U. (2006). Doing away with 'study skills'. *Teaching in Higher Education, 11*(4), 457-469.

Wingate, U., Andon, N., & Cogo, A. (2011). Embedding academic writing instruction into subject teaching: A case study. *Active Learning in Higher Education, 12*(1), 69-81.