



*Conference Paper*

## **Assessing the Impact of Embedding Online Academic and Information Literacy Resources into a First Year Business Course**

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### **Abstract**

**Objectives** – Literature supports the concept that embedding academic and information literacy support into first year university courses enables students to proceed more confidently with researching and writing their assignments, and thus contributes to student success in their course. A need was identified for academic and information literacy support for a cohort of first year business students as part of the development of online course content for Griffith Online, the institution’s online study degree option. This led to a collaboration between information literacy librarians, learning skills advisers, educational designers, and academic course convenors to develop and implement online resources. This paper will present findings on the impact of these online resources.

**Methods** – Drawing on measures and methods identified in ISO16439 “Information and documentation: Methods and procedures for assessing the impact of libraries” (International Organisation for Standardization, 2014), in conjunction with the indicators offered by Lizzio’s

(2006) Five Senses of Success framework, evidence was collected and combined from a variety of sources over semester 2, 2014, and semester 1, 2015 to assess the impact of the online resource. Inferred evidence was gathered from usage statistics (number of hits on the sites) and from performance measures (comparing student essay grade between those that did and did not use the resource). Solicited evidence was gathered from a survey of students, students in focus groups, and interviews with course lecturers, tutors and other stakeholders.

**Results** – The inferred evidence showed a positive impact on the student success indicators of the sense of resourcefulness, capability, connection, purpose and identity. The solicited evidence suggests that students saw the online resource in a positive light and that staff were happy with the impact it had on students’ work and learning. It is believed that the gathered evidence indicates the Module did achieve the impact objective of a positive impact on the contribution to student success for these first year business students.

**Conclusions** – The evidence has shown that this resource contributed to student success, and that staff and student satisfaction with the resource contributed to increased confidence with student academic skills and information literacy in respect to their assignment task. Assessing the impact of the online resource on student success has helped to demonstrate the value of the library at Griffith University to the wider community. The four-pronged collaboration relationship required for this approach was fostered with stakeholders outside of the library.

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## **Introduction**

One of the key future trends in higher education identified in both the “New Media Consortium (NMC) Horizon Report” (Johnson, Adams Becker, Estrada, & Freeman, 2014) and the “Top Trends in Academic Libraries” (Association of College and Research Libraries [ACRL] Research Planning and Review Committee, 2014) is the integration of online, hybrid, and collaborative learning. Like many academic institutions, Griffith University is moving to online modes of course delivery. For learning advisers and information literacy librarians to address this shift, it is necessary to engage with the e-learning environment. A core first year Bachelor of Business course moving into the online environment presented the opportunity for collaboration between an information literacy librarian, a learning adviser, an academic, and an educational designer in the creation of an online resource for the teaching of research and writing skills in support of student assessment.

Literature supports the concept that embedding academic and information literacy skills into

first year university courses enables students to proceed more confidently with researching and writing their assignments, and thus contributes to student success in their course. The creation of online embedded resources represented a new direction for library teaching and learning at Griffith University. Therefore, it was necessary to assess the impact of the resources to clarify the library’s contribution to student success and academic library value.

Drawing on measures and methods identified in *Information and Documentation: Methods and Procedures for Assessing the Impact of Libraries, ISO16439* (International Organisation for Standardisation [ISO], 2014), evidence was collected and combined from a variety of sources to assess the impact of the online resource. The evidence shows that this resource contributed to student success, and that staff and student satisfaction with the resource contributed to increased student confidence with academic and information literacy in respect to their essay assessment task. An integral part of this success was due to the collaboration between information literacy

librarians and other stakeholders in providing academic and information literacy support to the first year business student experience and engagement.

### **Background**

Griffith University offers a mixed mode method of delivery which consists of face to face and online offerings in courses and importantly, requires equity of access to services for both on-campus and online students. The University consists of five campuses over South East Queensland, with a student body of over 43,000. The Griffith Business School, with a student population of over 11,000, delivers courses at all five campuses as well as online. Historically, embedded information literacy skills and academic skills have been taught face to face in lecture time; however, due to the increasing amount of course content to be covered in lecture times, the opportunity to contribute has been severely reduced in the Griffith Business School. As more students move into the online method of course delivery, face to face delivery also represents a lack of equity in delivery for these students. Embedding online literacy resources offered an opportunity to redress this issue for a compulsory first year Bachelor of Business course, which had over 1,000 students enrolled. The online resource "Research and Writing for Business Students" (the Module) was created in collaboration with the course academic, the educational designer responsible for getting the course online, and Business Team Library and Learning staff, consisting of an information literacy librarian and a learning adviser.

Eight topics covering researching, writing, and referencing were included in the Module to support these students in their essay assignment task. The eight topics created consisted of:

- Navigating the library website
- Unpacking the question
- Scholarly and peer reviewed journal articles

- Searching the library catalogue
- Writing the plan
- Searching Google Scholar
- Writing the essay
- Referencing

These topics covered the key academic and information literacy skills needed to scaffold the completion of the essay assignment task. The Module was positioned in the course assessment folder, below the essay assignment task, in the learning management system, Blackboard, in semester 2, 2014 and semester 1, 2015. It was utilised in several tutorial and workshop sessions by course tutors to explain key literacy skills needed to complete the essay assignment task, and so was highly embedded into the teaching of the course.

Initial discussions about the creation of the resource highlighted the need for seamlessly embedding it in the course and for it not to appear as an add-on. To do this it was necessary to use the same interface and design established for the rest of the course and for the resource to be purposely built for the specific essay assignment task. Each topic of the Module included a short YouTube video with additional information and links to further resources, and focussed on the specific essay assignment task. The topics were personalized as much as possible in order to engage with students in the online environment, as suggested in the NMC Horizon Report (Johnson et al., 2014). For example, "searching the library catalogue" used keywords relevant to the essay assignment task, and "writing the essay" utilised exemplars provided by the academic.

The Module was designed in collaboration with the educational designer to complement the overall course interface, and the content was created in collaboration with the library business team learning adviser and librarian and the course academic. Importantly, it was strategically envisaged that the template for the Module and some topics could also be repurposed in other courses.

## Literature review

### *Collaboration*

Embedding information literacy and academic writing instruction into course curricula is not new. Literature supports that a collaborative approach to the embedding of information literacy instruction in course curricula has positive outcomes for students (Creaser et al., 2014; Menchaca, 2014; Nelson, 2014; Pan, Ferrer-Vinent, & Bruehl, 2014). A three-pronged collaboration model between an academic, a learning adviser, and an information literacy librarian has been suggested to overcome the often unrelated way that information literacy and academic skills have been presented in the past to university students (Einfalt & Turley, 2009, 2013; Kokkinn & Mahar, 2011; Taib & Holden, 2013). Tinto (2005) suggests that any support given to students should be related to a specific course and a specific task in order to help students succeed in that course and actively involve them in learning. Theis, Wallis, Turner, and Wishart (2014) agree that the development of students' academic literacies is enhanced through the use of curriculum embedded resources rather than add-on generic offerings from the library.

Any support strategy must be contextualised and connected to the environment in which student learning takes place (Nelson, 2014). The "NMC Horizon Report" (Johnson et al., 2014) identifies the rise of online pedagogy at higher education institutions. The e-learning environment can provide a student-centred approach where students can proceed at their own pace and use different media types that suit their style of learning (Lu & Chiou, 2010). For information and academic literacy resources to be useful in an online environment, collaboration in creation should be widened from the three-pronged approach to include an educational designer in order to enhance the environment in which the resources are to be placed (Gunn, Hearne, & Sibthorpe, 2011). As such, a four-pronged collaboration model

between librarian, learning adviser, educational designer, and course academic was used in the development of the Module.

### *Evaluation*

"The Value of Academic Libraries: A Comprehensive Research Review and Report" (Oakleaf, 2010) summarizes the importance for academic libraries to demonstrate their value, particularly in light of budgetary restraint and competing stakeholder interests. This importance is also emphasised in other studies (Bausman, Ward, & Pell, 2014; Brown & Malenfant, 2012; Creaser & Spezi, 2012, 2014; Gibson & Dixon, 2011; Tenopir, 2011). Rather than just reporting on library achievements, Kranich, Lotts, and Springs (2014) explore the notion of academic libraries turning outward so that library impact is measured in the contributions library achievements make to the broader community. Whilst there are many ways of defining value, Oakleaf (2010) identifies the two main approaches as financial value and impact value. Menchaca (2014) argues that for measuring value in the academic library, impact is the more important measure as it relates to learning. As libraries engage with the online space and the embedding of seamless resources, they face new challenges as users may no longer identify that space with the library. Consequently, the need to demonstrate impact becomes more crucial (Sputore, Humphries, & Steiner, 2015).

Studies support measuring impact that aligns with university outcomes (Brown & Malenfant, 2012; Oakleaf, 2010; Pan et al., 2014). Library impact on institutional outcomes of "student success, student achievement, student learning, and student engagement" can be explored through evidence based practice (Oakleaf, 2010, p. 12). As mentioned in the literature, links, although not always causal, have been examined between library usage and student outcomes such as attainment, recruitment, and retention (Haddow, 2013; Hubbard & Loos, 2013; Soria, Fransen, & Nackerud, 2013, 2014; Stone &

Ramsden, 2013). Gathering data, analyzing it, and presenting findings can demonstrate to academic faculty that collaborating with library staff is worthwhile and can contribute to student outcomes, thus creating library value (Oakleaf, 2010). As impact and value are so closely linked, this allows establishment of not only value for the Module but broader academic community library value (Bausman et al., 2014; Bonfield, 2014; Brown & Malenfant, 2012; Creaser & Spezi, 2012; Menchaca, 2014; Oakleaf, 2010; Pan et al., 2014; Tenopir, 2011).

“Information and Documentation: Methods and Procedures for Assessing the Impact of Libraries, ISO16439” (ISO, 2014) provides an internationally recognised basis for assessing library impact (Henczel, 2014). The standard describes effects such as “changes in skills and competence” and “higher success in research, study or career” (ISO, 2014, p. 14) as demonstrating library impact. In addition, collaboration between library and academic staff for embedding library resources in courses can also affect library impact through changes in attitudes and behaviour (ISO, 2014). Combining

methods can provide a fuller or richer story for assessing impact, but may also need more detailed analysis, as the findings from different source data may not be consistent (ISO, 2014). Henczel (2014, Sept.) provided a diagrammatic interpretation of the standard methods and procedure for assessing the impact of libraries (Figure 1).

At Griffith University, Lizzio’s (2006, 2011) Five Senses of Success framework has been used as a predictor of student outcomes. This framework examines students’ success as depending on their sense of capability, connection, purpose, resourcefulness, and identity, and is particularly useful as it facilitates “conscious and reflective practice” and forms a basis for student engagement strategies for the broader Griffith University community (Wilson, 2009, p. 7). A sense of resourcefulness and capability can be promoted if students can find the information they need and are prepared for assignment tasks at university level (Lizzio, 2011; Wilson, 2009). A sense of connection is encouraged by the quality of relationships that are formed at university with peers, staff and the affiliation with their

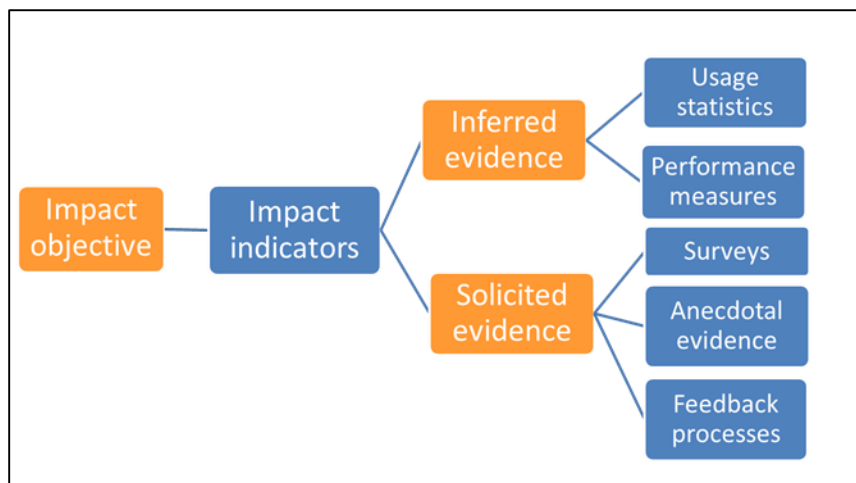


Figure 1  
Henczel’s (2014, Sept.) interpretation of impact assessment process based on ISO16439.

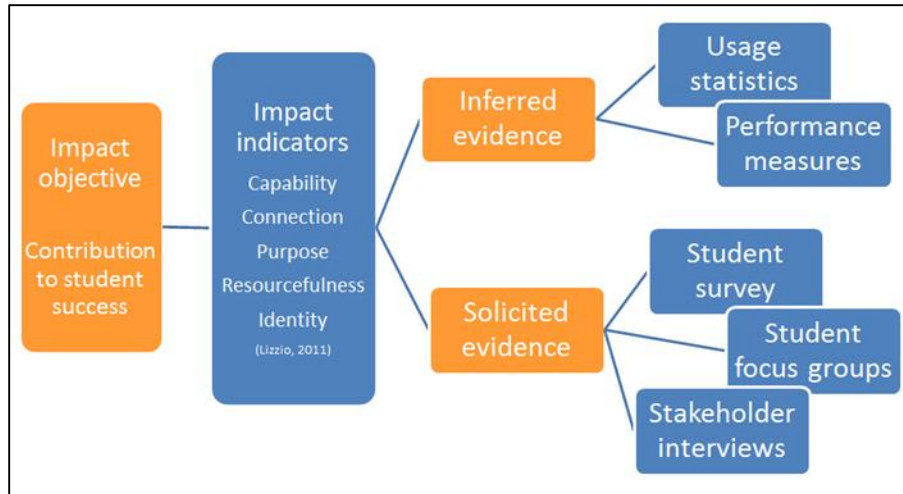


Figure 2

Impact assessment process based on Henczel's (2014, Sept.) interpretation.

school (Lizzio, 2011; Wilson, 2009). As strengths and talents are developed and students learn how things are done at university, a sense of purpose and identity are fostered (Lizzio, 2011; Wilson, 2009). Initially, the Five Senses of Success framework was introduced to support student retention and engagement within the first year, but this has been expanded to incorporate the whole student lifecycle (Lizzio, 2011). The use of the Five Senses of Success framework to examine the student experience is supported in other studies that evaluate student support and engagement, and adds metrics that are meaningful outside of the library environment (Burnett & Larmar, 2011; Chester, Burton, Xenos, & Elgar, 2013; Hutchinson, Mitchell, & St John, 2011; Sidebotham, Fenwick, Carter, & Gamble, 2015). The Five Senses of Success framework indicators can be aligned with those characteristics that have been previously used to evaluate e-learning programs, such as usability, content richness, flexibility, and learner community (Chiu, Hsu, Sun, Lin, & Sun, 2005; Lu & Chiou, 2010; Wang, 2003).

### Aim

The aim of this paper is to assess the impact of embedding an online academic and information

literacy resource into a first year business course. Measuring the impact will not only determine whether the resource created and provided to students made any difference to their success, but also demonstrate academic library value.

### Methods

Drawing on measures and methods identified in ISO16439 (2014), evidence was collected and combined from a variety of sources over semester 2, 2014, and semester 1, 2015 to assess the impact of the Module on student success.

Using ISO16439 (2014) as interpreted by Henczel (2014, Sept.) (Figure 2), an impact objective was established to discover if the Module contributed to student success. This objective was aligned with impact indicators based on Lizzio's (2006, 2011) Five Senses of Success framework of capability, connection, purpose, resourcefulness, and identity. Inferred and solicited evidence was collected to support and explore those indicators.

Inferred evidence was gathered from usage statistics (number of hits on the Module), and from performance measures (comparing student essay grade between those that did and did not

use the Module). Solicited evidence was gathered from a survey of students, students in focus groups, and interviews with other stakeholders such as course lecturers, tutors, and educational designers.

**Inferred Evidence**

Statistics tracking in the learning management system was activated for the Module for both semester 2, 2014 and semester 1, 2015. Usage data for day and time of access to the Module was also available from the learning management system, Blackboard. Usage data was matched to assessment grades from the Grade Center and the results analyzed using Microsoft Excel.

**Solicited Evidence**

Following a pilot survey in semester 2, 2014, a student survey was conducted in semester 1, 2015 with an announcement and link to the survey placed in the learning management system, Blackboard. The survey contained basic demographic questions, five response scale questions, and one open ended question for comments. An even number of options for the response scale questions ranging from strongly agree to strongly disagree was used to remove the undecided or neutral response (ISO, 2014). Each of the five response scale questions was designed to address one of Lizzio’s (2011) Five Senses of Success (Table 1).

Table 1  
Survey Questions

Survey Questions	Five Sense of Success (Lizzio, 2011)
1. The resource was easy to navigate and understand.	<ul style="list-style-type: none"> <li>Resourcefulness; did the Module help students to find information they need?</li> </ul>
2. After using the resource, I was more confident to research and write academically.	<ul style="list-style-type: none"> <li>Capability; did the Module help students to prepare for tasks at university?</li> </ul>
3. After using the resource, I was more confident in talking about the essay with other students and teaching staff.	<ul style="list-style-type: none"> <li>Connection; did the Module help students to engage with peers, academic staff and support staff?</li> </ul>
4. After using the resource, I was better prepared to complete the essay.	<ul style="list-style-type: none"> <li>Purpose; did the Module help students to develop strengths and talents?</li> </ul>
5. The resource helped to explain how assignments are done at university level.	<ul style="list-style-type: none"> <li>Identity; did the Module help students to learn how things are done as a business student at university?</li> </ul>

Two focus groups were held during face to face tutorial time: 15 students in the first focus group and 18 students in the second group. Students were asked if they had used the Module and what they found useful about it.

Stakeholder interviews were conducted and an email was sent to the lecturer, tutors, and educational designer with the following five questions:

- Did you refer to any sections of the Module in your tutorial sessions?
- What was your impression of it?
- Did any of your students comment on it?
- If so, what did they say?
- Do you have any suggestions as to how to improve on it?

**Results**

*Inferred Evidence*

Inferred evidence data collection was from spreadsheets within the learning management system which were collated with spreadsheets from the Grade Center. Although a time consuming process, the online data collection resulted in a clearer picture of how students accessed and returned to the Module, and matching usage with student essay assignment grades offered clearer information than could be gleaned from evaluating face to face teaching sessions.

*Usage data*

As presented in Table 2, the Module was accessed 4,442 times in semester 2, 2014.

Table 2  
Module Usage Statistics

	Semester 2 2014	Semester 1 2015
No. of students enrolled	1,023	784
Hits to Module	4,442	6,537
No. of students who accessed Module (unique hits)	910 (89%)	750 (96%)
Average number of hits by students who used the Module	4.88	8.72
% of students who used the Module >once	90%	95%



For individual students, this varied from not accessing the resource at all to accessing the resource 29 times. In 2014, 89% of the students accessed the resource, increasing to 96% in 2015. The average number of hits to the resource per student was 4.88, indicating that students did find value in the resource, as they went back to it multiple times. In semester 1, 2015, the Module was accessed 6,537 times, varying from accessing the resource once to accessing the resource 37 times. The average number of hits to the resource per student was 8.72.

Usage data for day and time of access to the Module (Figure 3) highlights the 24/7 availability of the Module. The Module was used on all days of the week and at all hours of the day.

**Performance results**

Comparing the average essay grade for those students who used and those students who did not use the Module (Table 3) indicates that use of the resource achieves a higher than average mark. In semester 2, 2014, the average class essay grade was 64%, those who used the Module acquired a slightly higher than average grade of 65%, and for those who did not use the Module the average grade was 47%. For semester 1, 2015, the average class grade was 58%, with those who used the Module receiving 61% and those who did not use the Module receiving on average 15%. This larger difference in 2015 between users and non-users of the Module could be attributed to the much higher usage of the Module in 2015. A high percentage

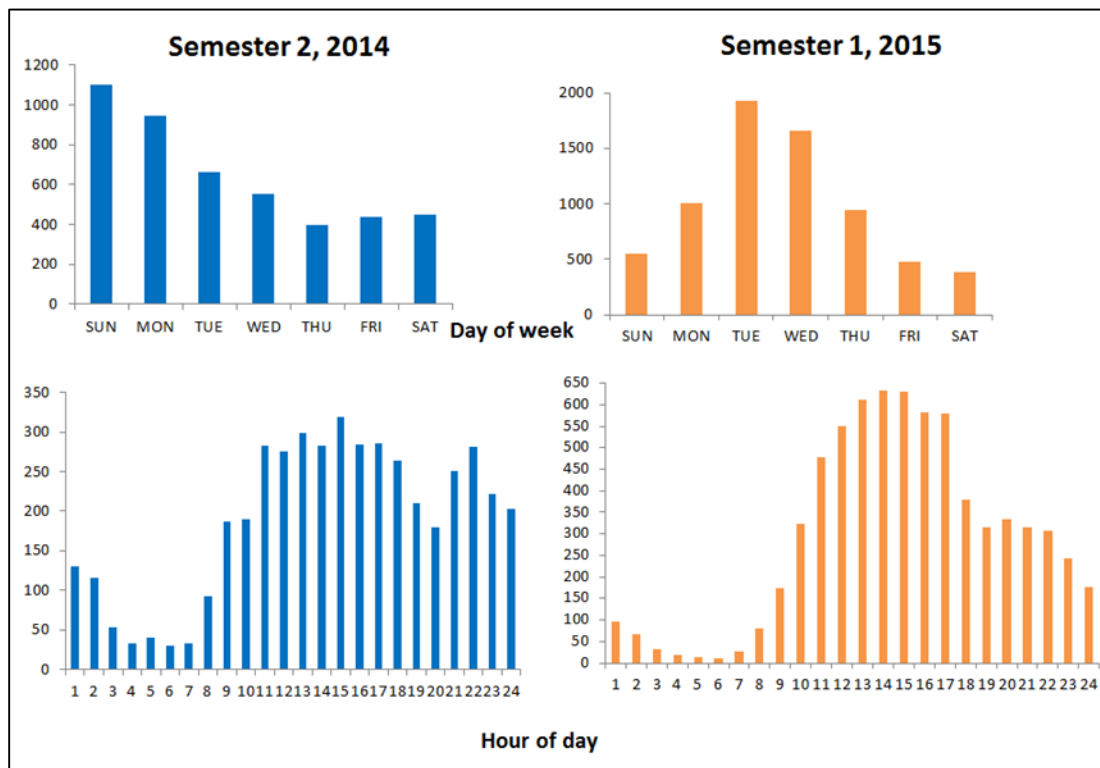


Figure 3  
Module usage statistics: days of week and hour of day access.

Table 3  
Comparison of Module Usage and Assignment Grade

	Semester 2, 2014	Semester 1, 2015
Average essay grade	16/25 (64%)	17.5/30 (58%)
Average essay grade those who used the Module	16.25/25 (65%)	18.2/30 (61%)
Average essay grade those who did not use the Module	11.7/25 (47%)	4.5/30 (15%)

of students (96%) accessed the Module in 2015. The remaining 4% who did not may represent the lesser engaged students.

#### *Solicited Data*

Solicited evidence collection tended to be better facilitated by a face to face approach. The online survey did not reveal as much information as the face to face focus groups.

#### *Survey*

The median survey response to all questions was between “slightly agree” and “agree,” indicating that the Module contributed to student success, as shown in Figure 4. This was supported by survey comments, in particular “I was feeling quite overwhelmed by the task of writing the essay, however after using the research and writing tool I feel a lot more confident and at ease as I have a better understanding of how to approach the task. Thank you.”

However, the number of responses to the survey was low (42 responses, of which 35 used the Module) and hampered by institutional policy on survey timing. This meant that the survey had to be concluded the same day as the essay

assignment was due, limiting student reminders. It is worth noting that surveys as a method of gathering evidence in the academic or institutional environment for evaluation of assessment items needs to be carefully considered within the larger institutional environment due to conflicting survey priorities. Even though response rates were low, the data from the survey adds to the overall picture of assessing the Module and highlights the advantages of a combined methods analysis.

#### *Focus groups*

Overall, the focus group discussions were positive. For those students who did use the resource, they found the Module easy to navigate, particularly with the table of contents, as students could easily select the topics that were most useful to them. Of the eight topics, those rated as most useful were “Writing the report” and “Referencing,” although others found the searching topics useful as they were unsure of search terms. Other comments included “Had no idea what to do and resource gave me lots of ideas of what to do,” “Helped clarify the questions,” and “Video format easy to watch.” Two students did not watch the videos as they preferred to use the transcript, which highlights the need to consider different learning styles.

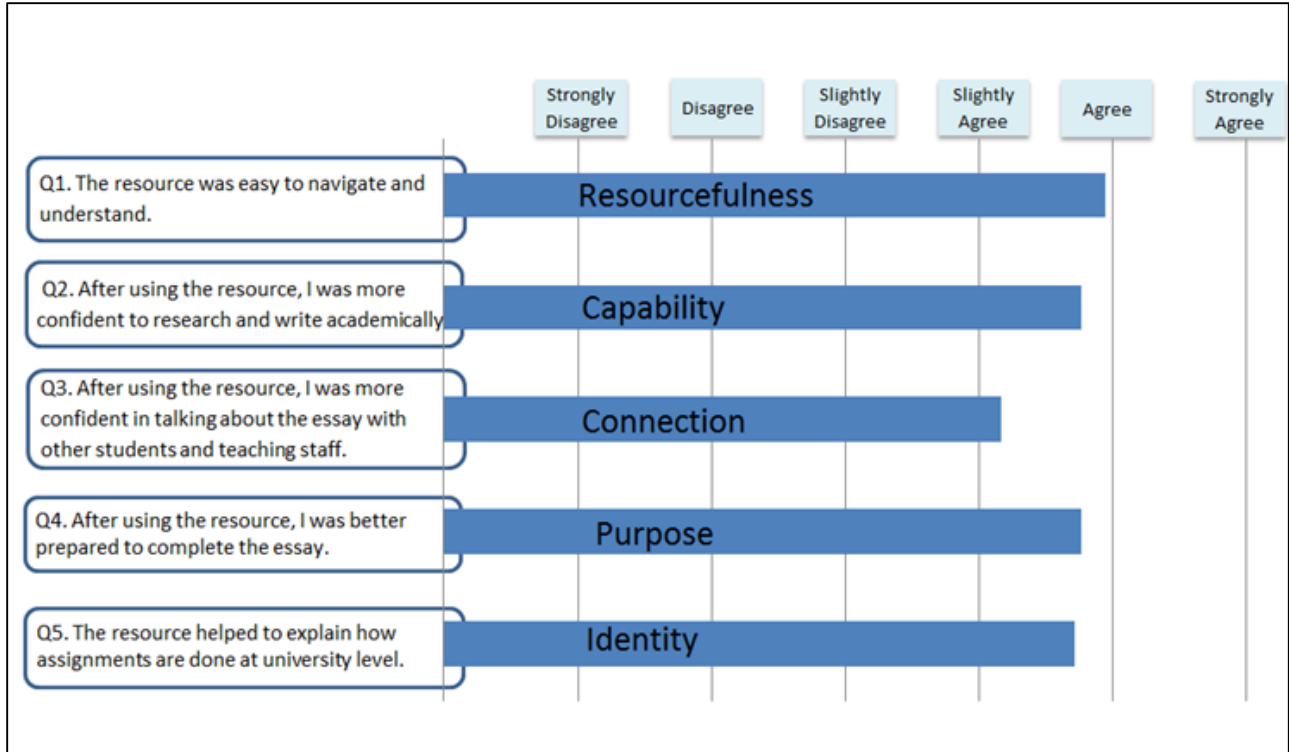


Figure 4  
Survey results.

The most frequent reason given for not using the Module was that they did not know it was there, which highlights the importance of collaboration for support and promotion from academic staff. Interestingly, students responded that they had not used the Module even though topics had been shown during tutorial time. This highlighted the problem of assessing the impact of a highly embedded resource when students assumed that it was just another teaching tool of the course and did not associate it with being provided by the library.

*Stakeholder interviews*

Tutors reported via the course convenor that they received fewer than usual academic and information literacy questions about the essay assignment from students, and the “Students said they found the videos helpful and came to see me to clarify points in relation to their essay.”

Tutors’ comments below highlight the use of the Module as a teaching tool:

“I can report that the Research and Writing for Business Students Module on the course website were a valuable learning and teaching tool. I referred to every section of it during tutorials/workshops leading up to the due date for the submission of the essay.”

“The short video clips were generally very good and I received overwhelmingly positive feedback from my student cohort.”

Some tutors mentioned that whilst the Module was embedded into the tutorial and videos scheduled at various points in the semester, technical issues on numerous occasions prevented the videos from being played.

Tutors' comments also highlighted the timesaving benefits of the Module for tutors:

"The fact that the resources are all together is handy for students and helpful to tutors who have limited time allocated in class to develop students "basic" writing skills. The students can choose to access the support tools/information whenever, wherever, however many times they like."

"In responding to queries from students about an aspect of their research or writing process, I was able to direct them to the relevant resource in addition to providing my own guidance by e-mail or in person."

One suggested improvement "Would be to make the video clips more concise to hold students attention. This could perhaps be achieved by using more focused and direct language."

The educational designer has since shown the Module to other interested academics and commented that:

"The quality and value pretty much speaks for itself. Academics like that it's co-located in the Assessment folder so it's easy for students to find and it's contextual. They like that it's similar to what is taught into a course on-campus, but it's online... which means students can access it whenever they like, when they need it, as they are doing their assignments... they can see that it will lead to fewer questions for them!"

## **Discussion**

Gathering the data to support the impact objective was made easier with the use of the framework offered by ISO16439 (2014) for assessing library impact, in conjunction with the indicators offered by the Five Senses of Success

framework (Lizzio, 2011). Using this multifaceted approach to data collection, as recommended by the standard, allowed for a fuller picture to be drawn.

The inferred evidence showed a positive impact. The usage results indicate that the Module added to the student sense of resourcefulness and capability; they were assisted in finding the right sorts of information they needed at the right time (Lizzio, 2011). The high number of repeat visits to the Module at various times of the day indicates that students found the Module of assistance in writing and researching for their assignment. The increase in usage over the semesters may highlight the uptake of the Module as a teaching tool by teaching staff. The high number of average hits to the Module per student indicates the library's engagement with the students enrolled in these courses. Linking this back to student success, this high usage could be interpreted as the Module contributing to the resourcefulness and capability of students in engaging them in the learning process in assignment preparation and research (Lizzio, 2011).

The performance measures indicate that the Module added to the students' sense of capability; they were more able to complete the assignment to satisfactory levels if they had used the Module (Lizzio, 2011). Matched with the high usage rates, these performance statistics could indicate that those students who used the Module were more engaged with the course.

The solicited evidence suggests that students saw the Module in a positive light and that staff were happy with the impact it had on students' work and learning. The student survey and focus groups gave some indication that students found a sense of purpose and identity in their preparation (Lizzio, 2011). Their comments and survey responses supported that they were learning how to research and write for their assignment task, as well as how things were done at university (Lizzio, 2011). The interviews with stakeholders gave a sense of promoting

connection, that students were part of their learning process and were able to access help from the Griffith University community (Lizzio, 2011).

Assessing the impact of the Module provides the opportunity to reflect on practice. From feedback it was evident that some structural changes need to be made to the Module to make it more targeted and direct. Looking at the Module from the student's viewpoint and also the environment into which it has been embedded has made it clear that any topic which was not assessment focused needs to be re-examined. The necessity of collection and analysis of data is highlighted by the fact that Module usage may not correspond with student identification of assistance from a learning adviser or librarian, as the resource for assignment assistance is so embedded into the course. This indicates an area for further study, as highlighted by Sputore et al. (2015). However, the evidence collected does provide support for continuing collaboration using the four-pronged collaboration model between librarians, learning advisers, academics, and educational designers in the production of these embedded online assessment based resources (Gunn et al., 2011).

The assessment of the Module enabled the alignment of library practices to institutional strategic and operational plans through collaboration and building partnerships with academics, learning advisers, and educational designers. It has helped to demonstrate the library's contribution to the achievement of Griffith University's strategic changes, such as meeting operational plans of a fully online, seamless student model and meeting opportunities presented by changes to teaching semesters.

Using a combination of ISO16439 (2014) with Henczel's (2014, Sept.) diagrammatic interpretation of the standard and Lizzio's (2006, 2011) Five Senses of Success framework may be beneficial to other academic libraries and the broader library community wishing to engage in

evidence based practice to measure library impact that aligns to institutional outcomes. For other libraries, different impact objectives and indicators more relevant to their institutional outcomes may be more beneficial in assessing impact.

Engaging in this research has provided the opportunity to document procedures and practices surrounding data gathering, analyzing, and reporting. Documenting the process is valuable to establish a library connection to institutional outcomes, and worth considering for any libraries wishing to engage in evidence based practice.

### **Conclusions**

Overall, the evidence showed that over 90% of students accessed the online resource "Research and Writing for Business Students," and it was well received by both staff and students. Students have stated that it gave them the confidence to get started on their assignments, and academic staff commented that it decreased the amount of generic questions they received about the assignment. Using the criteria of the Five Senses of Success (Lizzio, 2006, 2011) as impact indicators, it is believed that the gathered evidence indicates the Module did achieve the impact objective of a positive impact on the contribution to student success for these first year business students.

Assessing the impact of the online resource "Research and Writing for Business Students" on student success has helped to demonstrate the value of the library at Griffith University to the wider community. The Business Library and Learning team at Griffith University moved its teaching practice into the online environment, but did not lose relevance in supporting students. The four-pronged collaboration relationship required for this approach was fostered with stakeholders outside of the library.

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