Article

Giving voice to regional Australian academic librarians: Perceptions of information literacy and information literacy instruction

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Abstract

Academic librarians deliver information literacy instruction (ILI) to students, engage with a range of stakeholders, and work in a range of learning environments that are continually changing. While past research has focused on the perceptions of librarians regarding their role in ILI, this has not been a significant focus of research in the Australian higher education context. This study set out to explore the perceptions of six practising academic librarians at a regional Australian university, seeking to understand their perceptions of information literacy (IL), their role in ILI and the challenges they face in this role. The participants did not have a consensus on the nature of IL, despite having a clear definition from the institution. Librarians felt they had both an educative and supportive role and that they brought expertise and authority to ILI. Librarians noted that their ILI supported the broader function of the university to meet internal policies and external regulatory requirements. Librarians suggested that an integrated approach to ILI at the institution would improve librarians' agency in supporting students. The analysis of the findings led to the development of a model for the delivery of effective ILI for this institution. The findings of this study contribute to the existing body of IL research by (a) giving voice to the views of academic librarians working in a regional Australian university, and (b) highlighting the challenges that academic librarians face when delivering ILI at their institution.

Keywords

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1. Introduction

Information literacy (IL) can be described as a skill set that enables a person to effectively work with information: the ability to seek, evaluate, use, create and manage information that can be used throughout a person's life to support lifelong learning (International Federation of Library Associations and Institutions [IFLA], 2005). The ever-increasing availability of information and its impact on one's learning has led to IL being recognised as a transferable skill set and a key focus of higher education (HE) institutions (Australian Qualifications Framework Council [AQF], 2013; Currey et al., 2018). The key players of IL skill development, or information literacy instruction (ILI) in HE are academic librarians (Zanin-Yost, 2018). ILI can take many forms

including formal classes, appointments or asynchronous online resources and contributes to wider IL programs in HE which are shaped by institutional policies and external accreditation requirements (Saunders, 2011).

However, successful student engagement with IL programs is influenced by (a) the level of engagement of the academic staff (Douglas & Rabinowitz, 2016; Yevelson-Shorsher & Bronstein, 2018) and (b) the opportunities for students to apply IL skills and knowledge in practice (Walton & Hepworth, 2011; Williams, 2017). While these elements may be well established, developing an understanding of how academic librarians perceive their role in shaping ILI will demonstrate how librarians achieve this engagement from a practice standpoint.

The role of academic librarians in ILI, and their perceptions of that role, have been studied extensively in both the United Kingdom and the United States (Lewitzky, 2020; Vassilakaki & Moniarou-Papaconstantinou, 2015). In Australia however, research has primarily focused on the attributes and skills librarians require to deliver ILI (Doskatsch, 2003) rather than their role in ILI. While identifying these attributes and skills are an important step to ensure librarians are equipped to deliver effective ILI, understanding the role from a practitioner's perspective can also assist the development of current and future librarians.

Additionally, the research on ILI in Australia has mainly focused on academic librarians working in universities located in large metropolitan areas rather than those in regional universities. Regional universities in Australia serve a quite different cohort of students to those attending metropolitan universities (Regional Universities Network, n.d.). These regional cohorts include a greater proportion of students from lower socioeconomic status areas, first in family and Aboriginal and Torres Strait Islander students (Regional Universities Network, n.d.). Understanding the perceptions of regional academic librarians provides an insight into the conditions in which they practice and the approaches they take to IL and ILI for these students.

Our understanding of the challenges that academic librarians face when delivering ILI is far from comprehensive. The preceding gap has been acknowledged by some earlier calls for more focused research on IL in the HE sector (Bruce et al., 2006) and recently echoed by key figures in IL research (Hicks & Lloyd, 2021). The lack of a clear articulation of librarians' perceptions of IL and ILI in HE hinders the ability of this rich field to play a more robust role in informing Library and Information Science (LIS) education and practice. If these role perceptions are not understood, the gap between theoretical premises informing the domain of IL and its practice will expand. It is hoped that the findings of this research will improve our understanding of the role that librarians' ILI plays in HE, and the challenges librarians face in delivering ILI.

This paper has been developed from a study completed as a part of a Graduate Certificate in Arts and Social Science Research. The study focused on the perceptions of librarians who deliver ILI to students at a regional university in Australia. Its design sought to develop an understanding of the librarians' views on IL, ILI and its contribution to student learning and development. This paper will focus on librarians' perceptions of IL and their ILI. The primary research question guiding the larger study was:

How do librarians at an Australian regional university perceive their role in information literacy instruction and how it contributes to student learning and development?

2. Literature review

2.1 The nature of IL

IL has been defined and redefined since its first inception in the mid-1970s (Behrens, 1994). The established definition of IL and the creation of IL development frameworks by library

associations and HE institutions (e.g., Council of Australian University Librarians [CAUL], n.d.; The Association of College and Research Libraries [ACRL], 2015) has led to several studies examining the frameworks and their application in universities (Conor, 2016; Johnston, 2020; Sparks et al., 2016). Research has investigated the perceptions and definitions of IL from both a faculty and student perspective (Bury, 2011, 2016; Dann et al., 2022; Gross & Latham, 2009). However, our understanding of the perceptions and definitions of academic librarians, who put these frameworks into practice, is limited.

Researchers have taken different approaches to the exploration of librarians' perceptions of IL. These approaches have included categorising librarians' definitions as IL concepts (Anyaoku, 2016) or as a skills-based or practice-based concept (Rath, 2022), and seeking to understand librarians' perceptions of the development of IL and whether a redefinition is required (Aharony & Bronstein, 2014). Anyaoku's (2016) study of academic librarians in Nigerian Universities, revealed that 15 of 31 respondents defined IL as a meta competence, encompassing multiple "information skills abilities" (p. 7). The remaining respondents limited their definitions to singular skills including information technology, use of the library and search skills. Most recently, Rath (2022) explored how academic librarians in the United States conceive IL and how these conceptions are formed. The study found that while the ACRL framework defined IL as a practice, and had done for over thirty years, there were still librarians that delivered ILI using this framework that saw IL as being skills-based. Understanding how librarians perceive IL may help us to understand how they approach their ILI. It may also help to develop a comprehensive approach to ILI which will be crucial in providing a consistent student experience.

2.2 Librarians' perceptions of their role in IL

The role academic librarians play in ILI and how they see themselves in that role have been studied worldwide. Recent reviews of this literature, scoping the years between 2000 and 2020, examined how academic librarians saw their roles (Lewitzky, 2020; Vassilakaki & Moniarou-Papaconstantinou, 2015). Lewitzky (2020) determined that although academic librarians provided ILI as a part of their duties, many librarians did not identify as having the role of teacher, with many internalising their teacher identity. Vassilakaki and Moniarou-Papaconstantinou (2015) revealed six main roles for librarians, which included the librarian as a teacher. Both studies showed that the misalignment between academic librarians' duties and perceptions of their role could be due to several things including:

- the lack of preparation they had received in either their library and information studies education or their workplace, and
- the environment in which they were working, where librarians were not seen by the institution and teaching staff as having a teaching role, but rather a supportive role.

Pagosky (2015), in his opinion piece on the then new ACRL framework, suggested librarians are subordinate to teaching staff in the HE hierarchy. However, he suggested that librarians could change this by broadening their pedagogical inquiry approach in relation to ILI, moving away from a skills-based approach which involves demonstrating databases and giving tours. This could alter the views of teaching staff and university administrators about the role librarians play at their institutions, thus positively affecting student outcomes (Pagowsky, 2015).
In the Australian context, a study in the early 2000s explored academic librarians' teacher identity (Doskatsch, 2003); however, this study focused on the skills and attributes of the librarian rather than the role librarians play in ILI. Some studies have examined the perceptions of IL and ILI (Hughes et al., 2017; Wilkes & Gurney, 2009); however, these investigations focused only on student populations. To date, Australian academic librarians' perceptions of their role in ILI has not been a focus of the research. Investigating the Australian context, particularly the regional university context, will provide this voice to the research and help us

understand the reality in which regional Australian academic librarians are practising and may offer an opportunity to develop a more effective ILI strategy at their institutions.

2.3 Challenges delivering ILI

The research focusing on the delivery of ILI is significant; it explores librarians' practice approaches (Anderson & May, 2010; Harrison & Deans, 2021) and the evaluation of student outcomes (Chow et al., 2020; Rahanua et al., 2016). The challenges librarians face during their ILI has also been a focus of research. Ivey (2003) interviewed a group of librarians and academics and found that librarians faced a number of barriers to the effective delivery of ILI. This included a lack of understanding of IL among academics and the need for the development of partnerships between academic staff and librarians. The study also suggested a need for increased support from management in the university's approach to IL as this would provide better resourcing and outcomes for students. These findings were supported in a recent study from Pakistan (Moin Ud Din et al., 2022) which found that librarians felt that there was a lack of IL awareness among academic staff and that there needed to be more coordination between administration and the library for delivery of ILI.

Investigations into the challenges faced by academic librarians in the Australian context are not extensive. Rae and Hunn's (2015) study found that to deliver effective ILI it was important to align the ILI strategy with university goals and to use a range of methods to engage students. Salisbury et al. (2012) noted that an effective ILI approach needed to be systematic, strategic and aligned with the university's aims. However, while both studies sought feedback from IL instruction stakeholders including tutors, students and academic staff, and were written by the librarians from the institution being studied, neither study sought the perceptions of the academic librarians delivering the ILI. The preceding gap is compounded by the fact that in Australia the difficulties faced in ILI by academic librarians working at regional universities are rarely examined.

3. Methods

Academic librarians operate in a world of people and information, where their main objective is to connect those people with information. The intent of this study was to explore the subjective perceptions of each librarian, understanding that each librarian would base their perceptions on their own lived experiences (Bryman, 2016). The interpretivist constructivist approach taken allowed the researcher to develop an understanding of the social worlds librarians inhabit and develop a subjective reality of the librarians and their role in ILI (Bryman, 2016; Guba & Lincoln, 1989; Howell, 2013).

To develop an understanding of this subjective reality, a single descriptive case study explored the phenomenon of ILI within the context of a regional Australian university (Yin, 2014). While following a theoretical framework at the beginning of a case study can provide a clear focus for the collection and analysis of data, it may lead to a false consensus, with the researcher having the data fit the chosen framework (Simons, 2009). Rather, this study developed its recommendations from the data, helping the investigator remain in the lived experience of the participants (Simons, 2009).

Ethics approval was sought and granted for the study. The study examined the insights of six practising academic librarians using semi-structured interviews and a thematic analysis of their responses. The following five questions were used to gather the librarians' responses:

1. What does information literacy mean to you?
2. What role does information literacy play in your clients' life?
3. What is a librarian's role in information literacy instruction?

4. What role does information literacy instruction play in student learning and development?
5. What do you think the key stakeholders of information literacy instruction at the university see your role being in information literacy instruction and its contribution to student learning and development?

Analysis of the interview transcripts was completed using an open coding thematic analysis. The thematic analysis produced themes derived from the data, helping the study to remain embedded in the lived experience of the participants (Simons, 2009). The concept of trustworthiness, an alternative approach to validity and reliability, informed the study's research design. Trustworthiness considers a study's credibility, transferability, dependability and confirmability to garner confidence in its interpretations (Guba, 1981; Shenton, 2004). The selection of an established research method is one example of how the study established its trustworthiness (Shenton, 2004). The approaches taken to trustworthiness will be highlighted in the remainder of this section.

3.1 Sample

The sample was drawn from practising librarians at a regional Australian university library with a student population of around 40,000. The institution supports the typical student demographic profile for a regional university with a considerable proportion of equity groups represented, e.g., First Nations students and First in Family. The university's graduate learning outcomes (GLO) define IL as the ability to demonstrate the capability to locate, evaluate, manage and use information and research to develop and guide students' knowledge, learning and practice. To support IL, the library provides a contextualised embedded librarian program, online library workshops, asynchronous conceptual videos, library resource guides, virtual services and one-to-one appointments. At the time of data collection, the primary researcher was employed by the institution and had an established rapport with the participants which provided a level of trust with the participants and hence contributed to the project's credibility (Shenton, 2004).

Practising librarian for this study referred to a librarian who had been in their role for more than 12 months and had actively provided ILI to researchers or undergraduate and / or postgraduate students. Participants were sought via email, and eight librarians volunteered. Voluntary participants allowed for a degree of random sampling, establishing a level of credibility to support the study's trustworthiness (Shenton, 2004). Six librarians were purposively selected to participate. This was done to meet the time constraints of the study and ensure a range of experiences and client bases were included (Patton, 2002). The final group of participants included two librarians from each experience level, early career (librarians who are still studying or had qualified in the last 12 months), mid-career (librarians who had qualified in the last 5 years) and established (librarians who had qualified over 5 years ago). This sample size cannot produce generalisable findings (Bryman, 2016) but has allowed for constructing an understanding of the librarians' perceptions at this institution.

3.2 Data collection and analysis

Semi-structured interviews, an established iterative method, provided the interviewer the freedom to explore the lived experiences of the participants while staying focused and systematic within the interviews (Patton, 2002; Shenton, 2004). Each participant was assigned a code, and a pseudonym was used for the library to protect their privacy. Before the interviews, participants were provided with a participant information sheet and consent form. Each interview was transcribed and de-identified and a transcript was provided to each participant for a member check. A reflective journal was maintained to note any thoughts, experiences and approaches that emerged throughout the project (Nowell et al., 2017).

The transcripts were analysed using Yin's (2015) analysis framework of compiling, disassembling, reassembling, interpreting and concluding. The data were disassembled with an open coding approach into meaningful groups using codes in NVivo (Castleberry & Nolen, 2018). Arranging the codes thematically allowed the data to drive the analysis rather than fitting it to an existing framework (Patton, 2002). The result was a set of themes that related to the research question. The interpretation of the themes was assisted by developing a thematic map (Appendix A), which also serves to illustrate the findings to the reader. The researcher had the supervisor spot check the coding and theme development against the code definitions to ensure consistency and sought verification from participants to check that the themes identified were consistent with their original intention (Castleberry & Nolen, 2018; Shenton, 2004). The thematic map and the data analysis allowed the researcher to formulate a model (Figure 1) that can be used in practice to inform the delivery of effective ILI in HE. The model also provided a frame in which to situate the discussion of the findings.

4. Findings

A thematic analysis of the responses provided insight into the participants' perceptions of their ILI and the challenges they faced during ILI. These perceptions can be categorised into three areas, the nature of IL, librarians' roles in IL and challenges faced by librarians. These are described below.

4.1 Nature of IL

The clear conceptualisation and operationalisation of a concept is important to ensure consistency in understanding and application. In the case of IL, it ensures the librarians, academics, the institution and students work towards a common goal. The participants were asked to define IL and their descriptions included a broad range of ideas. Table 1 displays the terms used in the participants' definitions.

Table 1: Participant terms used to define IL

Participant	Terms used
P1	skills, find information, using tools, evaluate, need, use
P2	search, find, access, evaluating, using
P3	find, evaluating, use the internet
P4	ability to deal with information, information need, managing, finding, using, judgement
P5	why and when you need information, finding suitable, use
P6	find information, need, strategies, determine if suitable, evaluate

4.2 Librarians' role in IL

Each participant was asked to comment on their position, day-to-day tasks and their thoughts on what role librarians play in IL and ILI. Librarians felt that their ILI role was both a supportive and teaching role. These two roles were identified in the analysis by grouping related language, which can be seen in Table 2. These terms were used in relation to more explicit roles that librarians felt supported both the students and the broader function of the university. This included the development of students' skills and a level of expertise and authority regarding IL.

Table 2: Language used to describe librarians' role in IL

Role	Language used
Supportive	assisting, helping, guiding, supporting
Teaching	equip, teaching, teaching partner, deliver, explaining, showing, directing, providing an overview

Librarians felt that when they delivered ILI, in any form, they were developing students' IL skills and their understanding of the importance of these skills for their studies and lifelong learning. One librarian commented:

> a big part of our role or responsibility to obviously teach people these information literacy skills and that does start with them even knowing they need them in the first place.

Some comments alluded to the role as being an educative one, contributing to the IL skills required for lifelong learning:

> where you say well look, in order to search for this, this is the best way to search … they should take that on as something that they've been able to learn and acquire and be better at because an important part of being a professional is staying up to date with knowledge, current knowledge and practice, and in order to do that, you need that information seeking and using skills.

However, librarians felt they were also supporting students to develop IL skills for the more immediate need of assessments and learning. This was seen in comments such as:

> to assist students within those subjects to develop information literacy skills that they need for that particular subject. We're supporting them in the education and achievement of qualification. That would be where I devote a lot of my energies.

Librarians felt they were providing a level of expertise regarding IL, which contributed to the broader function of the university and student learning and development. Good relationships with academics led to students being better connected with ILI and better subject resources:

> making a subject be well supported with resources, helping the academic to use our resources and get students to those resources as well.

Internal university policy and external regulatory requirements from the Tertiary Education Quality and Standards Agency (TEQSA) and other accrediting bodies, require students to demonstrate throughout their degree that they have specific skills and attributes, including IL. Librarians were aware of these requirements, and how their role contributed to students developing these skills, thus supporting the broader needs of the university:

> in order to get through your studies to a level that is required by TEQSA, by professional accrediting bodies all of that. In an academic library it's the teaching and learning environment … and the graduate learning outcomes are a sort of a manifestation of that, it's built in…I think that gives us a more formal role in information literacy instruction.

These findings showed that librarians see their support and teaching role as contributing to both student learning and the wider university context. Ultimately, librarians see their role going

beyond assisting a student to find information for their next assessment, stretching long past graduation.

4.3 Challenges delivering ILI

The interviews included explicit questions about obstacles librarians encountered when delivering IL. The responses showed that despite a clear IL GLO and the level of expertise librarians bring to ILI, the agency of their role in supporting students and academic staff was not always acknowledged. While librarians did not see these as widespread challenges, nonetheless they inhibited the contribution the librarian and ILI could make to student outcomes. Librarians identified the institution's IL GLO, but felt this did not lead to a consistent, integrated approach to IL or ILI across the university. Their perceptions of university administrators' engagement with IL and ILI included:

> They understand that students love the library…And I think that they probably would think it's an important part of the student experience, but I'm not sure that they will really understand down to you know that level, the way we help students develop those information literacy skills. I think they probably know, realise, we are going into classes, but maybe they don't understand … how important our role is in that information literacy and helping that research around assessment tasks, I don't know if they know the depth of what we do.

Support from academic staff was welcomed, but librarians did not feel that all academic staff understood the contribution librarians could make to student outcomes in the broader sense:

> I think they think that we're valuable in, one showing them all the resources on the library, but two how to research for those, that particular assessment task, and I think most of them say that really as a valuable thing. **Interviewer:** Okay, and do you think they see it past that assessment task, do you think they see it as contributing to a bigger set of skills or just for their subject? **Librarian:** Some do, some I've had asked for evaluation techniques that students can then apply once they graduate to look at information…I guess just probably not all, but yes definitely some do.

The participants felt that high academic staff turnover at their institution also contributed to the lack of IL awareness among new academics and its significance for students' development:

> I think the turnover of academic staff makes things difficult as well… you might have developed a really good relationship with one academic staff member and being able to provide a lot of support the students in a particular subject... they leave or they're taken off the subject … and then there's another staff member who takes over, who, perhaps doesn't have the time or doesn't see the importance of providing information literacy support. They might even do something like changing assessment task, which we had based our information literacy support around and then the support we were providing seems no longer relevant.

The increasing workforce casualisation of teaching staff, with little to no opportunity for training on IL or the ILI students would receive could lead to a reduction in the effectiveness of the ILI:

> They just don't understand why we're involved or what we're doing, and so they might not want us in there, or they put us in at the wrong time, like we come in, week one and we're having to talk about assessment three. Which is pointless, because nobody's thought about assessment three yet.

This lack of understanding of IL from academics, librarians noted, was also reflected by some students they worked with.

> I think there are always difficulties when you are tasked with presenting something to students who you've not really met before and probably will never meet again … That has challenges, because you don't know the students, you don't necessarily know their backgrounds, you don't get a chance to know them. They don't know that they need us to help them. They don't know that what the library does … a common example is students in third or fourth year saying gosh I wish I knew about the library sooner.

Although librarians felt they contributed to positive student outcomes, they felt if there were opportunities for better connections with students, it might lead to a greater understanding of the importance of developing IL and how librarians and the library can do that across the university:

> I'm not sure that students understand that they are developing skills, even when they are.
> Because I think students don't necessarily appreciate, to the extent the way we do, or we think we do, the significance of information literacy.

Librarians presented three solutions that could help address the challenges they face. These solutions addressed the challenges of institutional awareness about IL, librarians' relationships with academics and students' engagement with ILI. The first of the librarians' solutions was to recommend that the institutional awareness of the importance of IL and ILI to student outcomes needed to be increased. This could be achieved by developing an integrated approach to IL across the institution. By having this higher profile endorsement from the institution, librarians could have more productive conversations with informed and motivated academics.

> In some instances I'm just brought in for that moment in time. When I, I think that in reality, there's probably … an opportunity for a librarian, whether it's a course review, teaching or whatever. To be brought through more consistently. As almost a teaching partner as opposed to maybe a more supportive role.

Librarians' second solution suggested that with better marketing and opportunities to build relationships with academic staff, librarians could engage staff and students more effectively in ILI.

> definitely that promotion and endorsement of our, um, support and the value it would bring I think yeah and again a lot of that's just communication like communication between library and faculty staff or academics. And then between academics being able to promote any and support us out to you know to their students or to others.

The third solution from the librarians proposed implementing interactive elements and student focused communication within the ILI they deliver to support librarians to engage students in the importance of IL and ILI in their learning and development.

> Bringing in some interactivity in the form of like pre and post assessment like a quiz or show of hands or something. I've used a Menti quiz to get a gauge on the room around how comfortable they felt and how stressful research felt. And that's a very personal response, and that was in part one, so I could see where they were. But also, so they could see where each other is kind of up to. They're not on the only one that really struggles with this.

This study gathered the librarians' perspectives of IL and their role in ILI. In doing so, the librarians also outlined the challenges they have faced in delivering ILI and proposed solutions for these challenges. These findings have contributed to a model (see Figure 1) developed from the larger study. This model can inform the practice of ILI delivered by librarians in contexts like the one examined in this study.

Figure 1: Model for delivering effective ILI
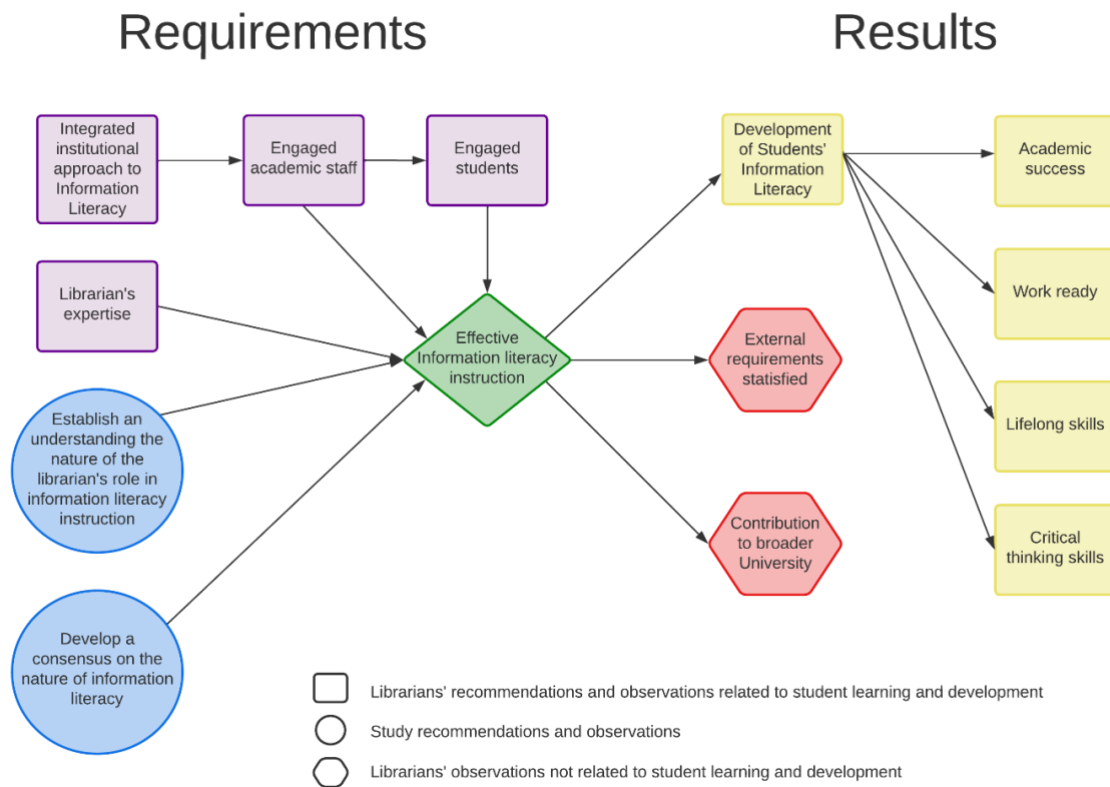
5. Discussion

The discussion below reviews and explains the findings through the lens of the model.

5.1 Nature of IL

One of the recommendations of this study, seen in Figure 1, was to develop a consensus on the nature of IL among librarians and the institution. As discussed earlier, there are a variety of IL frameworks and working definitions, and the participating institution has its own definition and framework to support the university's GLOs. However, this study showed that despite this, a consistent definition of IL was not forthcoming from the participants.

The concept of 'find' was present in all six definitions of IL given by librarians, while 'use' was present in five of the six definitions. This showed a level of consensus among the participants on certain aspects of IL. It could be argued that these definitions informed the librarians' ILI at the institution. Head's (2017) study of graduates from United States universities, found that graduates felt comfortable finding and using information after they had graduated. Head's findings corroborate the IL conceptions of librarians in this study and point to some of their areas of focus in ILI.

Two capabilities explicit in the institution's definition, 'manage' and 'access', were mentioned by half or less of the participants. Just one established career librarian mentioned 'manage'. This could be associated with the participant's vast experience and training. Three librarians, with a spread of experience, mentioned 'access'. While their experience and training in the role may not be at play here, their life experiences of ILI may have led them to include this term.

The institution's definition of IL also includes 'being able to research and develop knowledge'. This capability was not mentioned at all by the participants. Inversely, the capability of identifying an information need, which is not included in the university's definition, was mentioned by four participants. There could be a range of reasons leading to this; all four participants who included this term have supported the same faculty, so it may be a common idea for that faculty or that they have learnt from one another.

Identifying the definitions of IL from practising librarians' perspectives, allowed us to see what their focus of IL was, and potentially the content they were imparting to students in their ILI. A lack of consensus on the definition of IL among participants presents important questions for the institution to focus on. Does the institution need to revise its definition and IL framework? Are librarians delivering the skills and knowledge for the university's IL capabilities in their ILI to students? Does the library need to do more library staff training in relation to the conceptual dimensions of IL to ensure students are receiving the support they need in their learning? Addressing these questions would enable the library and its librarians to have a consistent approach to IL and ILI, resulting in a consistent service and experience for all students.

5.2 Librarians' role in ILI

This study's recommendation in Figure 1 was to establish an understanding of the role of librarians in ILI at the institution. Understanding how librarians see their role will contribute to the implementation of this recommendation. However, the library and the institution also need to work on determining the role librarians play which will also assist to establish a broader understanding at the institution of how librarians and their ILI contributes to student outcomes.

Librarians identified that they felt their role in ILI could be broken down into four key areas:

- understanding the nature of librarians' role in ILI;
- the outcomes librarians were hoping for when delivering ILI;
- broader contributions made to the university; and
- the expertise they bring to the delivery of ILI.

This study revealed that the participants identified they had two roles in ILI an educative/teaching role and a supportive role. The finding of the teaching/educative role was perhaps an obvious one and was evident in the language librarians used to describe their work, e.g., teach, deliver, explain and direct. As seen in statements such as:

> It's the informal assistance which, which is, after all… a teaching moment.
> We have a working knowledge in that area and can explain the…ins and outs, the whys…in a little more depth.

It also aligns with past research examining the teacher identity and roles of librarians in ILI, with academic librarians identifying as having a teaching identity, although not always externally expressed (Lewitzky, 2020; Vassilakaki & Moniarou-Papaconstantinou, 2015).

The supportive role identified by librarians was twofold: that of supporting students, but also supporting the institution to meet its internal policy and external regulatory requirements. The librarians' inclusion of these supportive roles may be due to the library's current role at the

institution, with the library solely responsible for the IL GLO, or how the library frames its services internally, with librarians delivering these services. It would be revealing for the future of librarianship to investigate whether this is the case at other institutions and in other library environments. This would also allow us to better understand the librarian's role within their libraries, institutions and the profession at large.

As we saw in the findings, librarians felt their role in ILI was to develop students' lifelong learning skills and workplace preparedness. They also considered their ILI as an opportunity to help students understand the significance that IL can play in their professional and personal lives. Workplace IL studies support these findings (Kolstad, 2017; Lloyd & Williamson, 2008), and it was encouraging to see librarians working at a university that focuses on the professions, conscious of the part their ILI plays in students' futures. It could be useful for the profession to understand how and why the participants were aware of this role of ILI. Was it due to their institution's emphasis on IL or was it down to the way the library approaches ILI at the institution?

The participants also saw their role in ILI as contributing to the broader university function, supporting GLOs and meeting regulatory requirements. Librarians noted that delivering ILI also includes supporting academics to understand (a) the resources available for students and (b) how to connect students to the library. Vassilakaki and Moniarou-Papaconstantinou's (2015) study supports this finding, showing that this role was key to integrating librarians into the broader university. Developing a better understanding of this supportive role that librarians take on can be useful for increased advocacy about the work librarians do across the institution.

The participants felt they brought a level of expertise in IL and ILI to the university. However, this was not necessarily held or understood by other sections of the university. In Australia, qualified librarians are educated in the importance of the development and delivery of ILI (Australian Library and Information Association [ALIA], 2021), as well as its role in their clients' development (ALIA, 2020). Acknowledgement of this expertise by both the library and university administrators would support broader conversations about the value the library and librarians bring to an institution.

5.3 Challenges delivering ILI

Figure 1 outlines a model for effective ILI. While it doesn't explicitly include the challenges faced by the participants, it does include the recommendations from the study that may help resolve these challenges.

Librarians identified the challenges they faced when implementing ILI from three sources:

- institution,
- academic staff, and
- students.

At an institutional level, the culture and context of an institution influence how student learning manifests (Broido & Schreiber, 2016). Bruce et al. (2006) also identified that the environment in which IL and ILI are situated affects librarians' perception and delivery of ILI. The role of context in IL and ILI has been a focus of several studies (e.g., Lloyd, 2005; Webber & Johnston, 2017). For instance, Webber and Johnston argued that IL is essentially contextual (2017, p. 167) whereas Lloyd encouraged librarians to inform their ILI by knowing different contexts that help a person to become information literate (2005, p. 82).

In this study, participants acknowledged that the institution had a policy that included IL as a GLO, and that there was a strategic approach to ILI by the library. However, as we will see shortly, this is not always sufficient to ensure a comprehensive and consistent approach to ILI

across the institution. Librarians suggested an integrated approach to ILI would be more effective than just a strategic approach from the library. Such an approach would include policies and processes that outline how and when ILI was to be integrated into the curriculum to support learning across the institution.

The literature shows that collaboration with academic staff in delivering ILI results in more successful outcomes for students (Anderson & May, 2010) and this can be crucial in advancing ILI (Flierl et al., 2020). However, the participants' experiences showed that this collaboration was not always forthcoming from academics. They reasoned that the suggestion of an integrated approach might contribute to more academics understanding and actively engaging with IL and ILI in their courses, a suggestion supported by Salisbury et al. (2012).

In earlier studies, librarians have reported a lack of understanding among academic staff about librarians' role within the university (e.g., Ivey, 2003); however, the librarians' ideas of how this could be addressed were not captured. The current study attempted to address this gap by seeking librarians' perceptions on the challenges they faced in terms of engaging academics with ILI. They identified two key reasons, firstly, the high rate of academic staff turnover and increasing workforce casualisation of teaching staff, making it difficult to include IL capabilities consistently in course content and assessments. Secondly, limited opportunities to engage with academic staff resulted in a lack of understanding about librarians' role in supporting students. An integrated approach to IL would provide more opportunities for relationship building and better marketing of the library's services to academics, particularly sessional staff. This approach aligns with the *Six Frames for Information Literacy Education* (Bruce et al., 2006), which establishes a common starting point among stakeholders from which to approach ILI in the curriculum.

A key challenge librarians felt they faced when delivering ILI was their ability to make a long-term connection with the students in that class. Often, their ILI was delivered with a single interaction in a subject and online via Zoom or a recording, and they felt this could lead to less-than-ideal student engagement in ILI. The literature shows that student connection is enhanced with interactive elements (Luetkenhaus et al., 2017) and through contextualising IL content within a subject (Johnston, 2010). Librarians recognised that their current approaches in the ILI interventions could be improved by having more interactivity. This would assist in establishing connections with students early in their academic journey, reducing the hesitation that a student may feel when seeking help from librarians in the future.

Although these challenges are not unique to regional universities, it is important to highlight the challenges, nonetheless. Understanding the challenges faced by librarians can help their institutions improve the working environments, which can be beneficial not only for the librarians, but also for student outcomes.

6. Contributions and implications

University libraries and academic librarians have a critical role to play in the development of students' IL capabilities, preparing them for their future work and lives. Libraries should actively identify, develop, and empower the next generation of librarians to help students fully participate in an information society (CAUL, 2020). Following CAUL's statement, this study gave regional librarians a voice that contributes to the broader discussion on the role of librarians in IL and ILI in the HE sector. This study made three contributions that are outlined below.

Firstly, this study has contributed to our understanding of IL from a librarian's standpoint. The librarians' definitions of IL set the groundwork for the study and helped identify what they saw as the key elements of IL. Although there was a consensus on the elements of 'finding' and 'using'

in the definitions, the lack of consensus among participants and lack of alignment with the institutions' definition, showed that more work is needed to carefully conceptualise IL at the institution so consistent and effective ILI can be delivered to students.

Secondly, the challenges librarians face when delivering ILI included a lack of an integrated approach to IL at the institution and a lack of engagement from some academic staff and students. The solutions identified by the librarians align with the research on IL and ILI. Implementing the proposed solutions in the model will enable the library and librarians to deliver more effective ILI, appropriately placed within each program of study. It will help the institution achieve its aim of developing work ready graduates who flourish and develop into becoming effective citizens.

Finally, this study has added the voice of regional Australian academic librarians to the discussion of librarians' role in ILI. The vocabulary used to describe their role and the contributions their expertise make to student learning outcomes and the institution demonstrate to university administrators, library educators and library stakeholders the value qualified librarians bring to an academic institution. It also illustrates to those studying to become librarians the importance their education and experience will bring to their clients' experiences.

7. Limitations

The findings of this study and its contributions to the body of research need to be considered within the context of this research. It is important to acknowledge that work experiences, education and the overall context of participants' lives must have impacted on their perceptions about IL and their role in ILI. It is quite likely that other aspects of IL and ILI may emerge when librarians at other regional institutions are participants. It is also important to note that with a small sample of six participants, transferring the findings to a wider context is inappropriate. However, this study can be replicated with a larger participation group using the interview guide and research processes outlined in this paper. This can lead to further investigations of librarians' perceptions of IL and ILI, with the possibility of comparisons of perceptions of regional and urban academic librarians. Additionally, the thick description of the context of the study can help a researcher to identify the elements of the case that are relevant to their own context.

8. Conclusion

Both university libraries and academic librarians have a critical role in preparing students for future work by enabling the development of skills and capabilities that allow them to participate and thrive in a digital information society. This study set out to understand the perceptions of a small group of academic librarians of IL and their role in ILI. It has presented the views of these librarians, providing an insight into the unique contributions they feel they make to their institution and student outcomes. These views need to be shared with all stakeholders so that the value academic librarians provide can be seen by university and library administrators, students, academic and professional staff alike. As acknowledged, the context of this study was limited to a small group of librarians from one institution. However, this opens the door for further study of librarians' perceptions of their role in a wider cross-section of institutions and other contexts.

This broader voice will provide a deeper foundation for creating transferable recommendations for academic libraries. It was hoped that by amplifying the voice of academic librarians, this study would highlight the valuable work librarians perform daily, producing information literate students empowered to shape their own personal, social, professional and educational lives.

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Declarations

Ethics approval

Please see above, section 3., "Methods", p. 137.

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Appendix A: Thematic map of librarians' perceptions