# Chapter 6

# Information Literacy Research: The Evolution of the Relational Approach

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# **ABSTRACT**

Information literacy is an issue of growing global concern. Amidst changing technologies, our information worlds intersect with all aspects of our lives. This chapter introduces the relational approach to information literacy, its evolution, application in contemporary research, and emerging directions. It presents the approach, as introduced by Australian researchers, as an integration of experiential, contextual, and transformational perspectives. The chapter first reflects on the wider information literacy domain and then addresses the development of the relational approach, its fundamental elements and characteristics, as well as its adoption in key contexts. The chapter also explores significant studies that have contributed to its evolution and considers the impact of the development of the relational framework and related research. The chapter concludes with a focus on new directions emerging from the relational understanding of information literacy.

### INTRODUCTION

Information researchers, educators and professionals have long debated the meaning and application of the term *information literacy*. Its history is complex, entwined with multiple other literacies,

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and with library instruction and information skills. The term, coined in 1974 by Paul Zurkowski, was adopted by libraries and the wider information profession following its use in the 1989 Final Report by the American Library Association (ALA). Historically, the favoured means of explaining information literacy is grounded in the behavioural approach, which views individuals as needing to develop competence in specific skills

in order to become information literate. According to the ALA (1989) and the Association of College and Research Libraries (ACRL) (2000, p. 2), "Information literacy is a set of abilities requiring individuals to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information." This remains the dominant approach for explaining, teaching and researching information literacy. This view of information literacy has developed within educational settings, with information literacy defined as a skill or set of skills that needs to be developed or attained.

The ongoing association of the term *information literacy* with a behavioural view, built on standards and goals and focused on developing information literate individuals, poses challenges for those seeking a more nuanced or holistic approach to information literacy. Just as the ways in which we use information have evolved, so too should our understanding of what it means to be information literate.

Since its widespread adoption by the library and information community, 'information literacy' as a term and construct has been seen as problematic. The use and meaning of the term has been contested ... and we have been urged to consider different ways of thinking about the concept (Lupton, 2008, p. 230).

With the rapid pace of technological change and the quantity of information increasing at unfathomable rates, the behavioural approach may no longer be sufficient. Certainly, it is no longer reasonable to suggest that individuals merely need to achieve competencies or skills. Alternative approaches are needed for understanding and interpreting information literacy that reflect our fast paced, constantly changing, intersecting and unique information worlds (Limberg, Sundin, & Talja, 2012). Three particular evolving approaches, known as relational, sociocultural, and discur-

sive understandings of information literacy are critiqued by Limberg, Sundin and Talja (2012).

This chapter highlights the way in which the relational approach has evolved in response to this information literacy research agenda. Rather than considering information literacy as a goal, researchers adopting the relational approach explore how information literacy is experienced. The relational approach challenges information researchers, educators, information professionals and wider society to look afresh at how individuals engage with information to learn in all aspects of their everyday lives. The relational approach makes it possible for all sectors of the information profession to consider anew how people experience information literacy in their environments.

This chapter considers the significant contributions of Australian and international researchers in this contemporary information literacy research domain. The adoption of the relational approach is explored in the contexts of education, workplace and community settings. Key studies are highlighted with an emphasis on new directions in thinking emerging in this space and potential implications.

### BACKGROUND

The relational approach is interested in the relationship between people and information literacy or, in other words, how people experience information literacy. It has to do with researching experience as an object of study and adopting experience as a theoretical construct. This requires researchers to adopt a holistic perspective in understanding information literacy to explore what constitutes information literacy in people's experiences in different contexts. In order to understand the relational approach to information literacy, it is necessary to retrace its evolution as an object of study and a means to researching information literacy.

# **Origins of Information Literacy**

An exploration of contemporary information literacy research and practice reveals a relatively short history, originating in the education and library science disciplines and grounded strongly in the needs of practice. Definitions of information literacy were formed for use in educational and library spaces, focusing on learning skill sets to enable effective learning (American Library Association, 1989, 2006; Association of College Research Libraries & American Library Association, 2000; Bundy, 2004).

While information skills have been a topic of discussion in school and university libraries since the 1970s (Hughes, Middleton, Edwards, Bruce, & McAllister, 2005), it was not until after ALA's (1989) watershed report on information literacy that libraries and the information profession directed serious attention and funding towards associated programs. Librarians looking to promote libraries and information based education in schools and tertiary institutions were credited with making use of the term information literacy, which was generally associated with an "information literate individual" (Bruce, 1997, p. 3).

Australian librarians and educators began promoting information literacy in schools and universities in the 1980s (Bruce, 1997). A new wave of interest came to Australia as a result of the Candy Report (1994), which made the link between lifelong learning and information literacy, particularly in the context of tertiary education (Bruce, 1998). Consequently, by the late 1990s, the majority of academic and school libraries were operating under information literacy frameworks. In 2001, the Australian Library and Information Association (ALIA) declared information literacy to be a necessary requirement or prerequisite for "participative citizenship" and "learning for life" (2001, 2006, para. 3).

Of particular interest to advocates of the relational approach were correlations drawn between information literacy and lifelong learning, led by the ALA's (1989) Final Report, which proposed that information literacy is concerned with more than user education or information skills: "Ultimately information literate people are those who have learned how to learn." In response, Bruce suggested, "Skills or competency-based approaches may conflict with the under-lying intention of information literacy education, which is to prepare independent lifelong learners" (Bruce, 1998, p. 26). Different ways of experiencing information literacy were proposed as the cornerstone of making a wide range of information literacy experiences possible.

The "uncertainty about the distinction between information literacy, bibliographic instruction and library skills programs" garnered passionate debate (Bruce, 1997, p. 11). Some questioned the validity of reducing information literacy to a set of attributes or skills that one must develop (Foster, 1993; Kirk & Todd, 1993). Arp pointed the way towards alternative directions in commenting, "Our limited insights into the experiences of information users make it difficult to communicate the nature of information literacy" (Arp, 1990, in Bruce, 1997, p. 10). These concerns fostered the development of research using alternative ways of exploring information literacy.

# Origins of Information Literacy Research

An exploration of the history of information literacy research also reveals a relatively short life. Doyle's (1992) Delphi study of definitions of information literacy is regarded as the first information literacy research study. Discussion around the need to explore information literacy in the Australian context was initiated by Kirk (1987) and followed up by Todd (1995). Researchers and doctoral candidates at a number of universities in the Asia/Oceania region, primarily in Australia, continue research in this domain today. It was in this context that Australian researcher, Christine Bruce developed the relational approach, using

phenomenographic methods to explore information literacy in terms of experience. Research using a relational approach began with Bruce's (1994) foundational study of doctoral students' experiences of literature reviews, followed by her key work in exploring higher educators' experiences of information literacy (Bruce, 1997).

Hughes et al. (2005, p. 11) make the observation that an important part of research in the contemporary information literacy domain is underpinned by "approaches best described as qualitative, interpretive or even critical in orientation." Since 2005, the phenomenographic approach to information literacy research has become one of two dominant approaches in the Australian information literacy research domain – the other being the practice based or sociocultural approach led by Annemaree Lloyd (see for example, Lloyd, 2007).

Australian researchers have also led a shift in context for information literacy studies, with a number of studies focusing on learning *outside* traditional learning contexts. Research has focused on learning in workplace and community settings, and researchers using the relational approach are making significant contributions in this space. Hughes et al. (2005, p. 2) suggests,

The concept and application of IL in Australia has developed gradually, in line with an increasing recognition of its social and educational relevance. It has evolved from library-based, task-oriented bibliographic instructional procedures in universities and schools to a web of theoretical understandings and practical applications that promotes a critical approach to information use and underpins independent lifelong learning in formal and informal settings across the community.

In concert with the foundational developments in information literacy research by Doyle (1992) and Bruce (1997), Australia saw a "gradual shift of emphasis away from 'bibliographic instruction' and 'user education' to a holistic approach to IL in higher education that enables students to learn

how to learn and provides a foundation for graduates' [sic] continuing growth and role as informed citizens" (Hughes et al., 2005, p. 3).

# RELATIONAL APPROACH TO INFORMATION LITERACY

The relational approach to understanding information literacy was developed using the research methodology of phenomenography (Marton, 1981; Marton & Booth, 1997) and originated in the field of educational research. In phenomenographic research studies, researchers use categories to describe people's different ways of experiencing phenomena. The focus of phenomenographic research is on the critical differences between different ways of experiencing something; understanding 'what varies' between the categories lies at the heart of phenomenography.

The outcome of a phenomenographic inquiry is the identification of the different ways people experience a phenomenon and the structural relationships between these different ways of experiencing, expressed as a finite set of categories – such as the Seven faces of Bruce's (1997) model of IL (Hughes et al., 2005, p. 11).

While sharing a broad interest with other qualitative researchers in experience and active learning, phenomenographers have a unique concern for variation in experience as well as a distinctive perspective on experience. Experience is not considered to be a characteristic of individuals but rather is formed within the relations that exist between people and their experienced world. Underpinning phenomenography is the variation theory of learning. In phenomenography, learning is described, not as something that occurs in the minds of individuals, but rather as a change in awareness or way of experiencing some aspect of the world. Learning is understood by gaining insights into what varies across different ways of

experiencing a phenomenon. Helping learners expand their own experiences across the bandwidth of variation identified brings about learning.

Bruce first employed phenomenography for the purpose of information research in her 1994 study of how doctoral students experience literature reviews. She chose to use this approach because it is "compatible with an understanding of learning as coming to experience phenomena in new or more complex ways" (Bruce, 1998, p. 26).

Bruce (1997, p. 13) succinctly describes the fundamental features of the relational approach:

- Taken from users' experiences
- Seeks variation
- Uses phenomenography
- Recommends relational approach to teaching and learning
- Does not measure information literacy
- Describes rather than defines information literacy
- Does not quantify information literacy
- Asks what has been learned rather than how much
- Describes information literacy in terms of conceptions (subject-object relationships)
- Focuses on personal qualities in relation to, not apart from, the environment.

While considerable research attention has been directed towards teaching and learning from an experiential perspective, in her 1998 article, Bruce observed, "Very little attention has been paid to the role of information use in the learning process" (1998, p. 25). She suggested that phenomenography enables the relational approach to information literacy because it provides useful experiential depictions of the different ways people experience information literacy and the connection between using information and learning.

Phenomenography has been developing as a tool for exploring variation in teaching and learning for two decades. Its successful application in researching conceptions or experience of many phenomena made it the most appropriate choice for studying variation in the experience of information literacy (Bruce, 1998, p. 27).

Supporting this point, Yates, Partridge and Bruce (2012, p. 113) suggest, "Phenomenography's special attention to variation in experience makes it useful for understanding users' experiences of any phenomenon of interest in the library and information sphere."

Leaving behind the traditional, cognitive and constructivist approaches to defining and understanding information literacy, the relational approach, underpinned by phenomenographic thinking, describes information literacy as how people experience their information worlds. Particular attention is given to the distinct ways in which they discern those worlds. People's ways of being aware of the world vary and, as a consequence, so do their ways of using information. These variations provide an important key to understanding how people experience information literacy and lie at the heart of the relational approach.

In essence, the relational approach to information literacy adopts the theoretical underpinning of phenomenography noted above and, therefore, shares the qualitative, experiential, relational and second order perspectives of that research approach. In contrast to the more commonly adopted approach to researching information literacy, which consisted largely of the expert views of information literacy scholars and researchers, the relational understanding seeks to describe people's varying information literacy experiences.

While Bruce's (1997) information literacy research was the first study to explicitly adopt a relational view, other research has followed in assisting to further develop the relational understanding of information literacy. In Australia, the individual works of Edwards (2004, 2006), Kirk (2002), Klaus (2000) and Lupton (2004, 2008) and the collaborative studies of Bruce, Edwards and Lupton (2006) and Yates, Partridge and Bruce

(2012) progressed this thinking, continuing the development of the phenomenographic research base in the contemporary information literacy research domain.

Bruce's early work developed in parallel with Louise Limberg's (1999) phenomenographic study on information seeking and learning outcomes in schools. It is interesting to note that while Bruce and Limberg both focus on experience in their respective studies, Limberg has taken a more practice oriented, sociocultural approach to understanding the experience of information literacy in recent times (Francke, Sundin, & Limberg, 2011; Limberg et al., 2012).

# The Seven Faces of Information Literacy

The Seven Faces of Information Literacy (Bruce, 1997) was the foundational outcome of Bruce's initial exploration of information literacy using a relational approach. This information literacy research aligned with a wider paradigmatic shift regarding literacy, also led by Australian researchers. Building on Freebody's (1994) work, Bruce commented, "Contemporary scholars of literacy are arguing for a move away from the idea of literacy as the unified possession of an individual or as a set of transportable skills, and towards the idea of literacy practices-that...shape...the everyday lives of individuals and communities" (Bruce, 1997, p. 12).

Bruce's study explored the phenomenon of information literacy, or more specifically, the different ways in which people experience information literacy (Bruce, 1997). She considered the experiences of higher educators, including lecturers, librarians, academic advisors and staff developers, from across Australia. The study resulted in seven categories, now known as the Seven Faces of Information Literacy, which are "seven qualitatively different ways of experiencing information literacy" (1997, p. 28):

- IT conception: Information literacy is seen as using information technology for information retrieval and communication.
- Information sources conception: Information literacy is seen as finding information.
- Information process conception: Information literacy is seen as executing a process.
- Information control conception: Information literacy is seen as controlling information.
- Knowledge construction conception: Information literacy is seen as building up personal knowledge base in a new area of interest.
- Knowledge extension conception: Information literacy is seen as working with knowledge and personal perspectives adopted in such a way that novel insights are gained.
- Wisdom conception: Information literacy is seen as using information wisely for the benefit of others. (*Bruce*, 1997).

It is important to note that it is not the categories that are the focus in this work but rather the relationships and variations between these categories. "The information literacy outcome space represents the relationships between those categories ... it depicts the phenomenon as a whole" (Bruce, 1997, p. 38). These findings contrasted significantly with thinking about information literacy at the time as Bruce noted:

We can conclude from the categories that information literacy is not a linear process, nor is it necessarily technologically driven. It is also not readily definable in terms of skills or attributes (Bruce, 1998, p. 42).

The relational approach attends to real life experiences, suggesting that information literacy is a unique connection for each individual in their awareness "of aspects of the world around them when they are working with information" (Bruce, 1998, p. 42).

The relational approach requires the identification of the key elements in awareness associated with each way of experiencing. In the Seven Faces, for example, information use and technology have a different place in awareness across the different categories, and each category also has a unique element not shared by the other categories. The identification of the critical dimensions of information literacy in different contexts has been an important element of ongoing phenomenographic projects in this domain.

Hughes et al. (2005, p. 3) affirms these aspects of Bruce's relational approach, observing:

[It] represents a paradigm shift in IL education since rather than prescribe required behaviours, it highlights variations in people's experiences, focusing on the information and the user's engagement rather than the technology. In this way it encourages a reflective approach to learning associated with engagement in relevant information practices.

Bruce's (1997, p. 39) study concludes with the challenge:

If we accept the idea that information literacy is phenomenal, in other words that it is something which is experienced by individuals, then it becomes possible to seek to understand the nature of information literacy without recourse to the understandings which have been linked to the concept to date.

# The Six Frames for Information Literacy Education

The relational approach also seeks to understand variation in educators' approaches to information literacy education. Just as *Seven Faces* describes different ways of experiencing information lit-

eracy, the Six Frames for Information Literacy Education provides a research-based framework for understanding different educational approaches to information literacy education in practical learning and teaching contexts. Based on the principle of variation theory, that "learning occurs when variation in ways of understanding or experiencing are discerned," the Six Frames seeks to encourage awareness about these variations so as to enable educators to bring about "learning through widening experience" (Bruce et al., 2006, p. 6).

- In the content frame, educators are focused on what students need to know about the topic, and the aspects of the world of information (resources and tools) they need to know about.
- In the competency frame, educators are focused on students acquiring the skills needed for practice, the discipline skills and the information skills relevant to the discipline.
- In the learning to learn frame, educators are focused on students using processes to be able to learn independently, including information processes and strategies needed to access and learn from the information environment.
- In the personal relevance frame, educators are focused on students finding relevance in the area of study, and in seeing personal and professional relevance in the use of the information environment.
- In the social impact frame, educators are focused on making the learning experience benefit society and the wider community, as well as helping students become aware of how their information use might influence social systems.
- In the relational frame, educators are focused on revealing/helping learners discern different (varied) ways of thinking about the topic, including different perspectives embedded in available resources.

Of the different perspectives on information literacy outlined above, the relational approach is typically the most complex. Bruce explains:

Teaching and learning information literacy would stress not skills acquisition but the growth of learners in coming to understand and experience information literacy in these different ways. In relation to information literacy education, this means that how someone understands or experiences information literacy is of greater importance to determining what they have learned, than how much knowledge or skill they can demonstrate (Bruce, 1998, p. 40).

This supports her earlier claim that "in devising new teaching approaches and evaluating existing curricula, higher educators would need to ensure that all faces of the phenomenon are considered" (Bruce, 1998, p. 41). The impact on information literacy statements and plans would be evident in the "emphasis on conceptions and experience rather than skills and attributes of individuals" (Bruce, 1998, p. 40).

Since their development, the Six Frames have been frequently used as the basis for professional development for educators, including information professionals in many countries. Moreover, Andretta (2007) uses the Six Frames to demonstrate how the higher education sector can promote lifelong learning through the adoption of a relational approach to learning and information literacy. By looking at learning experiences from the viewpoint of the learner, Andretta (2007) supports the view demonstrated by Bruce et al. (2006) that the relational approach to information literacy education, as conceptualised in the Six Frames, can make a valid and significant contribution to lifelong learning. Both Seven Faces and Six Frames are foundational to Bruce's most recent expression of the relational approach, captured in her monograph, Informed Learning (2008).

## Informed Learning

In her 2004 work, Bruce points to the potential for a relational understanding of information literacy to influence learning:

Information literacy...is clearly part of the fabric of learning, and, if students are to learn to learn from the resources available in information rich environments, must be woven into the learning experience (2004, p. 3).

Based on the Seven Faces of Information Literacy and the Six Frames for Information Literacy Education, Bruce developed the concept of informed learning, which enriches understandings and practices of the relational information literacy approach. Bruce's (2008) theory of informed learning draws together work from the relational branch of information literacy research and gives life to a new expression of information literacy, that is, as the experience of using information to learn. Informed learning reaches beyond the understanding of skills and competencies to be acquired and used, to an understanding of experience with information use, within and beyond formal learning contexts.

Bruce (2008, p. 3) elaborates on this, suggesting that "informed learning is using information creatively, reflectively, effectively and ethically in order to learn in any of life's paths. It is learning that is grounded in the effective information practices of professional, community and academic life." In Bruce's words, "Information literacy (different ways of experiencing information use) makes informed learning possible" (Bruce, 2008, p. 3).

The relational information literacy approach sits at the very heart of informed learning. Informed learning, understood as 'using information to learn', has a specific meaning in its context of relational phenomenography. Each of the three key words is important and, when treated phenomenographically, in accordance with the research roots of the relational approach, have

very specific meanings. 'Use' is understood holistically in terms of people's engagement with information, not as a phase in an information process. 'Information' refers to what people find informing in their context. 'Learn' refers to a change or widening of awareness. This different understanding of information literacy takes information literacy research beyond the realm of library and information science and into the learning research domain (Limberg et al., 2012).

In informed learning, the phenomenographic principle of relationality informs the simultaneous focus on information use and learning. This is reinforced by significant outcomes from Lupton's (2008, p. i) doctoral thesis about the "experienced relationship between information literacy and learning." Lupton's work with tax law and music students demonstrated that in both of these two very different learning contexts students were likely to experience the relationship between information literacy and learning as either:

- 1. **Sequential:** Gather information first, then learn from it later, separating information and learning
- 2. **Cyclical:** Gather information, then learn from it, and repeat as required, maintaining the separation between information and learning
- 3. **Simultaneous:** Learn from information as I interact with it. Information use and learning are inseparable (adapted from Lupton, 2008).

Closely related to the six frames of information literacy education are Lupton's GeST windows, which also play a key role in Informed Learning (2008). Lupton "identifies three perspectives on literacy and reframes them as the GeST (Generic, Situated and Transformative) windows for information literacy" (2008, pp. 23-24). While Seven Faces looks at the different experiences of information use, and Six Frames looks at different experiences of information literacy education,

Lupton's Generic, Situated and Transformative (GeST) windows look at alternative ways of approaching information literacy from a literacy perspective. The GeST windows synergise with the Six Frames and are grounded in the same thought directions underpinning the relational approach to information literacy.

### RESEARCH CONTEXTS

#### Education

There has been a wide range of phenomenographic studies in Australian education settings that have developed further our understanding of information literacy from a relational perspective. Parker (2001) used the phenomenographic approach to explore the relationship between assessment and information use in the experiences of postgraduate coursework students with the purpose of informing teaching practice in higher education. This methodology was also applied by Edwards (2006) in a study of students' experiences of learning to search for information. Research by Lupton (2004, 2008) and Diehm and Lupton (2012) consider more closely the relationship between information literacy and learning.

In other parts of the world, researchers also adopted the relational approach to underpin their information literacy research in education spaces. In the United Kingdom, studies by Andretta (2007, 2012) used the relational approach to develop understanding about postgraduate students' learning about information literacy. Undergraduate university students' understandings of information literacy were researched by Webber and Johnston (2000). Boon, Johnston and Webber (2007) adopted the same methodology in their exploration of academics' experiences of information literacy. Williams and Wavell (2007) took their research into the context of secondary education to learn about how teachers understand information literacy. In the United States of America, studies by Maybee (2006, 2007) also attended to students' experiences of information literacy in undergraduate settings. All of these studies reveal ways of experiencing information literacy that have some overlap with the seven faces. Consideration for interest in alternative settings begins to appear in reflections on these studies. For example, "Although educationally focused projects predominate, increasing research activity is occurring in workplace and community settings. Interest in different cultural settings is also emerging, with investigations being initiated across cultures and into cultural influences" (Hughes et al., 2005, p. 1).

# Workplace

Bruce (1999) revisited the Seven Faces investigation in relation to workplace information literacy. Exploration of the meaning of information literacy in workplaces and industry from a relational perspective continued to contrast with and complement understandings emerging from other perspectives, including Cheuk's (1998) use of sense-making for studying workplace information literacy. This discussion moved the Seven Faces of Information Literacy beyond the original higher education setting, exploring the adaptability of the ideas to other workplace contexts. Bruce acknowledged that while some experiences were adaptable across contexts, the emerging ideas suggested that variations in context provide justification for exploring the relational understanding of information literacy across multiple settings to develop further understanding of how information literacy is experienced (Bruce, 1999).

The research of another Australian researcher, Annemaree Lloyd (2004), in the workplace information literacy space, developed in a similar period. While Lloyd operates from a sociocultural perspective, it is interesting to note the parallel developments. Both acknowledge that the workplace context impacts information literacy research in different ways compared with traditional education

settings. In contrast to the relational perspective, the sociocultural approach focuses on "the role of social construction of meaning in learning" (Maybee, Bruce, Lupton, & Rebmann, 2013, p. 4).

Some of the workplace contexts in which relational information literacy research is being conducted are part of, or related to, the information professions. Partridge, Edwards and Thorpe (2010, p. 294) explored the relationship between evidence-based practice and information literacy through the experiences of information professionals, highlighting the qualitatively different ways in which "information literacy within a workplace setting finds expression." The findings revealed that evidence-based practice is experienced as not relevant, learning from published research, a service improvement, a way of being, and as a weapon (Partridge et al., 2010). Demasson, Partridge, and Bruce (2010) employed phenomenographic methodology to study public librarians' experiences of information literacy, raising critical awareness about the differences between social and technical expressions of information literacy. Four qualitatively different ways of experiencing information literacy were discovered, including social, intellectual/evaluative, technical/technological/practical, and lacking in meaning. The work of Sayyad Abdi, Partridge and Bruce (2013, p. 49) looked at the varying information literacy experiences of Web designers, drawing attention to "insights into the professional practices in both areas of Website design and information literacy." This study took the exploration of experiences of information literacy beyond the workplace settings of the information profession, further expanding the scope of this emerging research space.

Other research influenced by and building upon Bruce's (1997, 1999, 2008) work in the workplace context is found in the United Kingdom and United States of America. O'Farrill's (2008, 2010) research in a tele-health organisation used phenomenography to develop understanding about effective information use and learning. Andretta's work, based on the *Six Frames*, explored the way

nurses experience information literacy education in the workplace (Andretta, 2009).

# Community

The relational approach has also been adopted as the basis for an increasing number of information literacy studies in the community space, highlighting the value of and attention given to forms of social and informal learning outside traditional educational settings. An increasing number of Australian researchers are taking Bruce's (2008) theory of *informed learning* and exploring how it can be used to explain experiences of information literacy in a wide variety of community settings.

In using the term community, studies using the relational approach refer to contexts of everyday life, those interactions that occur outside traditional education or workplace environments, both online and face-to-face. Bruce, Somerville, Stoodley and Partridge (2013, p. 237) propose, "Exploring informed learning in community settings enriches our understanding of the character of information literacy." It pushes the boundaries of understanding around what learning is and how it is experienced, beyond the traditional context of the classroom. It offers fresh insight into different expressions of information as it relates to these newly emerging understandings of learning. The following examples reveal something of how that happens and how those experiences differ from the standard set of information literacy characteristics.

Yates, Stoodley, Partridge, Bruce, Cooper, Day and Edwards (2012) employed phenomenography in a study of older Australians and their experiences of health information literacy. The research identified five different ways that older Australians use information to learn about health. These include storing information, managing information, tuning in to personal information, making a difference with information, and participating in an informed community. Another study by Gunton, Bruce and Stoodley (2012) focused on church communities as the context for an exploration of

informed learning, again finding five different, yet related, ways of using information to learn. Bunce, Partridge and Davis (2012) discovered four ways of experiencing social media for learning during times of natural disaster, consisting of monitoring information, community and communication, affirmation, and awareness. Forthcoming research by Demasson looks at the ways that participants in serious leisure activities use information to learn. The wide variety of ways of experiencing information literacy is much more visible in the community context than in educational and workplace contexts.

In their review of information literacy research within the phenomenographic framework, Hughes et al. (2005, p. 9) suggest that the expansion of studies into community contexts "provides further evidence of the widening perspective of IL research in increasingly varied cultural settings. Key issues in this sector regard information access, and the use of ICTs (information and communication technologies)."

# **Blending Contexts**

Some research projects blur the boundaries between contexts. Bruce's (1997) study, in its use of academics as subjects, spanned the contexts of education and workplace. McMahon and Bruce (2002) conducted a phenomenographic study of perceived information needs in cross-cultural community development projects, revealing five different, hierarchically related, ways of experiencing information literacy in that context. The outcomes offered potential strategies for introducing technology into this context spanning work and community settings. The pilot study by Gunton (2011), in exploring the experiences of using information to learn in church communities, also referred to more than one context, with participants consisting of ministerial agents and lay people, thereby situating the study in both workplace and community settings. Demasson et al.'s (2010) exploration of public librarians' experiences of information literacy also offered insights in both workplace and community contexts. In looking beyond the more frequently researched role of the academic librarian in relation to information literacy, this study offered an alternative way for the profession to consider information literacy in the form of the social experience mentioned above.

Further research drawing on the relational approach to understanding information literacy has occurred outside Australia. Somerville and Echohawk (2011) used the informed learning lens to develop understanding of how information use during learning is experienced in Native American and Hispanic communities in the US. The study highlighted the critical nature of continuing community participation and contribution in the effort to retain and develop collective knowledge. In an examination of teen content creators, Harlan, Bruce and Lupton (2012) explored the relationships between information experiences and information actions, focusing on informed learning experiences of teens in digital communities. This study emphasised the understanding of information and learning experiences as "grounded in context," adding, "once learners become aware of how they experience and use information to learn within a context, they can become more effective within those contexts" (Harlan et al., 2012, p. 585).

Our understanding of information literacy from a relational perspective continues to be constructed as researchers expand the scope of their research. Bruce's (2000) projections for the future of the research domain are proving correct with the emergence of research beyond traditional educational learning contexts and contributing to more collaborative research underpinned by an increasingly "consolidated research agenda" (Hughes et al., 2005, p. 1).

# EMERGING RESEARCH DIRECTIONS

As demonstrated in the preceding discussion, the relational information literacy approach builds upon a sound theoretical foundation and supports an expanding research agenda. Recent and emerging research reveals some strong prospects for further advancing theory and practice of the relational information literacy approach in Australia and elsewhere.

### **New Theoretical Directions**

Informed learning, or the ways people use information in the learning experience and the degree to which they are aware of that, has become an important focus for contemporary Australian information literacy research. This reorientation, from what information literacy is, to how it is experienced, has seen the emergence of further research using the phenomenographic approach in the information literacy research domain in Australia and, subsequently, around the world. Increased awareness of and communication about the experiential perspective of information literacy has contributed to the theoretical underpinning of the conceptualisation of information literacy.

Recent work adopting the relational approach is deepening our understanding of the interacting nature of the information experience and the learning experience as twin components of information literacy (Bruce et al., 2013). From an experiential perspective, information literacy is understood as "attending to information and learning in particular ways" (Bruce, In press, p. 2). This experiential way of thinking associates closely the relationship between information and learning as it is described in informed learning, using information to learn. Experiences of these intertwined elements, the information experience and the learning experience, have been observed in numerous research studies, all of which describe the varying ways that people use information to

learn. This can be seen in the faith focused study by Gunton, Bruce, and Stoodley (2012) in which information literacy was found to be experienced as growing faith, developing relationships, managing the church, serving the community, and outreaching beyond the community. For example, in the growing faith experience, information was identified as including artistic expression and narrative, craft, stories, the Bible, drama and song. Learning was experienced as personal reflection and study, small group and peer discussion, informal conversation, workshops, seminars, lectures, and learning by doing.

Most recent directions in investigating informed learning align with developments in the phenomenographic approach to research. This is demonstrated in the work by Maybee, Bruce, Lupton, and Rebmann (2013) that considers informed learning in a university classroom. Maybee et al. (2013) proposes the need to attend to the experience of using information to learn as part of the informed learning agenda. The focus of attention is on variation in the informed learning experiences that are intended by the teacher, the enactment of informed learning within the classroom, and the lived experiences of the students. As the theoretical construct of phenomenography evolves, it influences the relational approach to information literacy research, affecting its intentions, form and outcomes. The nature of the results also evolves, revealing different dimensions of using information to learn in particular settings. While the Maybee study was implemented in the classroom, the branch of phenomenography adopted is likely to be a valuable research tool in more informal learning settings. Maybee et al. (2013) also suggests that learning studies are a fruitful direction of phenomenographic research that explores what is effective in bringing about learning.

Some researchers are also discovering new outcomes, exploring informed learning through different theoretical lenses. Harlan, Bruce and Lupton (2012), Miller (doctoral study in progress)

and Whisken (2011) are opting for methodologies other than phenomenography. Constructivist grounded theory is used by Harlan, Bruce and Lupton (2012) in their exploration of informed learning experiences of teen content creators, and by Miller in her doctoral research about early career academics' experiences of using information to learn. Whisken is adopting an action research approach in a doctoral research exploration of informed learning in schools. This is a new form of research thinking that explores what was originally a phenomenographic concept (how people experience using information to learn) using another research approach (such as grounded theory or action research), thereby offering fresh perspectives on the experience of information literacy. With this emerging thinking also comes the realisation that people may interpret the concepts of informed learning, and using information to learn, without adopting the phenomenographic meanings originally attributed to them, thus using the relational approach as inspiration for novel directions.

These evolving theoretical directions are occurring not only in relation to the methodological advancement of phenomenography, but also in combination with other theories in particular settings. Whitworth (2014) combines critical, relational and sociocultural approaches to form radical information literacy. Somerville and Mirijamdotter's (2013) work is another example of this, drawing the relational approach together with Checkland's (1981) soft systems methodology, which employs systems thinking. Using informed learning to help her as a manager and practitioner, Somerville et al. (2013) explains how she uses informed learning in her practice and how she helps others become informed learners in the workplace.

The research journey around the relational approach has also contributed to the evolution of thinking around information experience as both a research domain and a research object (Bruce, 2011; Bruce & Partridge, 2011). Researching the

experience of information literacy is now being considered as part of a wider focus on researching information experience. At the same time, understanding the experience of information literacy may be considered to straddle the two domains of information experience and learning experience.

It is perhaps the attention to experience in the relational approach that enables researchers to offer new insights into how people understand their everyday information worlds. It affords a freedom to respond in ways previously unrecognised to issues that arise in these contexts. Bruce et al. (2013, p. 240) observe, "Adopting information experience as a theoretical lens where people are characteristically less constrained by academic and scientific values and processes is demonstrably able to yield rich data."

As the theoretical construct of information experience emerges in this space as another research domain of interest to contemporary information literacy it will be important to observe the interrelationship between experiential approaches to information literacy and studies that attend specifically to information experience. Bruce and Partridge suggest:

Researching information experience allows a broad understanding and interpretation of people's engagement and interaction with the information environment. A focus on information experience is likely to have a major influence on the field, drawing attention to interpretive and experiential forms of research (2011, p. 1).

Key in developing the information experience paradigm is the development of understanding around "what different contexts reveal about people's experiences of information use and the idea of information experience" (Bruce & Partridge, 2011, p. 2). Drawing these different research studies together, with current research models and methods, is a process, through which the Queensland University of Technology (QUT) Information Studies Group is transitioning, to

consolidate and build theories of information experience with experiential perspectives. However, further work is needed to define the scope of information experience as a theoretical construct, particularly as distinct from that of information behaviour (Bruce, 2011; Bruce & Partridge, 2011).

# Information Literacy Experiences Crossing Boundaries

Since its inception, the relational approach in the form of informed learning has crossed boundaries into a variety of new disciplines, such as health (Yates, Partridge, & Bruce, 2009; Yates, Stoodley et al., 2012), leisure (Demasson, in progress), social media, (Harlan et al., 2012) ethnic (McMahon & Bruce, 2002; Somerville & EchoHawk, 2011), religious settings (Gunton et al., 2012) and Webdesign (Sayyad Abdi et al., 2013). The wide range of variations between experiences of information literacy found through this research and across these disciplines and contexts provides supporting evidence of the usefulness of the approach. Recent and emerging research indicates that traditional demarcations between formal learning environments, workplace and community settings are increasingly blurred. While some crossovers are acknowledged in diverging contexts, insights into the unique character, especially the critical features, of the information literacy experience, in different contexts are of increasing value.

### **New Possibilities for Practice**

The potential influence of the relational understanding of information literacy is being demonstrated in areas of policy development in practice. It offers a new way of considering many issues and gives support for further pursuit of social and other informal learning experiences. Whitworth's (2011) analysis of information literacy policies using the *Six Frames for Information Literacy Education* offers insight into exciting new possibilities for practice, as does Somerville

and Echohawk's (2011) work in indigenous and ethnic communities.

Underpinned by a strengthening theoretical base, the relational understanding of information literacy, as conceptualised by Bruce (2008) in the theory of informed learning, is helping to push the contemporary information literacy agenda beyond the traditional education realm and into the everyday lives of individuals. It demonstrates the value of self-awareness in using information to learn and makes a very real link to the realisation of lifelong learning.

Work in this domain is also shaping a new learning dynamic or an alternative way of considering the relationship between the learner and information, and what this might mean for information literacy education. In traditional learning models, a list of skills and attributes, developed in accordance with expert opinion, is shared with learners. That is, experts pass their knowledge to learners. In order to be information literate, learners are told what to learn and how to learn it. This communication of information and knowledge is unidirectional, from educator to learner. This contrasts with the relational approach to information literacy education, which considers the relationship to be between learner and learner, where the 'teacher' is recognised as learning about and with the learners s/he is working with. The sharing of information and knowledge is multi-directional. Research is undertaken around learners' experiences, which then informs educators about possible ways of developing learning programs to widen learners' experiences. During learning experiences, an iterative sharing of information and skills occurs, in which educators and learners contribute to the mapping of what to learn and how to learn it. Of course, this awareness in learning experiences can occur both in and beyond the formal education scenario. Informed learning that occurs in workplace and community contexts can offer teachers and students alike opportunities to use information to learn.

#### CONCLUSION

The relational approach to information literacy has been, and continues to be, an evolving construct within the contemporary information literacy research field, with strong roots in Australian information literacy research. It seeks to develop understandings around the way people use information to learn in a wide range of contexts. This is a natural response to today's world, in which, "People, to function effectively in their personal and professional lives, need to understand and interact effectively with their ever changing information environment" (Bruce, 1997, p. 3).

As society looks for alternative opportunities for learning, outside traditional education spaces and towards social and informal settings, the importance of information literacy will only grow in significance. The value of informed learning in these social and community learning experiences needs to extend beyond the realm of researchers and information professionals to raise broader awareness of how it can assist individuals so they become aware of how they use information to learn. Continuing research in the contemporary information literacy research domain, grounded by the relational approach, will provide a solid basis on which this strengthening field can grow.

The emerging appreciation for what it means to be information literate anticipates an alternative pathway for informal learning experiences by which individuals become self-aware about how they learn, together with how they may use information effectively. This could blaze a new trail for researchers and practitioners alike in developing lifelong learners. The relational approach offers researchers and practitioners the possibility of moving forward into a new and, at the same time, theoretically robust understanding of what it means to be information literate and how to plan for information literacy education.

As researchers, we are obliged to continuously take a fresh look at how we approach information literacy in order to better encourage and support people in their information and learning experiences. The relational approach allows us to continue to look with new eyes at the myriad of ways people learn and use information in their everyday lives. When we do so, we can envisage how people can learn to be more actively engaged in the ways they relate as individuals in all aspects of their lives. This can improve individuals' interactions with information as they learn, not just in formal education contexts, but also at work, at play and in their daily lives.

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#### **KEY TERMS AND DEFINITIONS**

Behavioural Approach to Information Literacy: A perspective that considers information literacy to be concerned with the development of skills and competencies in relation to information use.

**Information Experience:** An emerging research domain and object of study in information studies that is exploring the relationship between information and people's experiences of their everyday worlds.

**Informed Learning:** An alternative way of understanding information literacy in which it is described as using information to learn.

**Phenomenography:** A qualitative research approach that explores experience, focusing on the variation or different ways of experiencing a phenomenon.

Relational Approach to Information Literacy: A way of understanding the relationship between people and the phenomenon of information literacy or how people experience information literacy.

Seven Faces of Information Literacy: A model of peoples' varying information literacy experience developed using phenomenography.

Six Frames for Information Literacy Education: A framework, following on from the Seven Faces of Information Literacy, that encourages educators to consider the relational understanding of information literacy in delivering learning experiences.