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CHAPTER 1

Windows on information literacy worlds: Generic, situated and transformative perspectives

Mandy Lupton and Christine Bruce

Since the early 1990s, information literacy has emerged as a research agenda and an area of curriculum practice in formal education throughout Western, technologized societies such as the United States, Canada, the United Kingdom, the Nordic countries and Australia. Information literacy has typically been seen as searching for, locating, evaluating, selecting, organizing and using information (Bundy 2004a). However, contemporary understandings based on empirical research link information literacy closely with the idea of using information to learn (Limberg 2000; Bruce 2008; Lupton 2004, 2008).

Information literacy incorporates the use of a range of sources and stimuli, including visual, aural, affective and embodied information. For example, information literacy not only encompasses activities such as finding and using information for completing assignments or planning a holiday, but it also encompasses a firefighter 'reading' and 'speaking' a fire (Lloyd &Somerville 2006), an Indigenous Australian 'learning the language of the animals' (Mengel 2007) and a Canadian Inuit 'reading' the ice (Campbell 2004).

Some see information literacy as a separate literacy, while others see it as belonging to a literacy continuum (Boyce 1999, 2004). The term 'literacy' implies something fundamental and foundational. Information literacy is one of a number of literacies that have been acknowledged as an outcome of advances in information and communication technologies and the ubiquitous nature of this technology in Western societies (Cope & Kalantzis 2000b). Literacy scholars and practitioners have recognized information literacy as a 'new basic' literacy (Australian Council for Adult Literacy 2004).

In this chapter, we examine information literacy as a literacy and we present the information literacy discourse as mirroring the wider literacy discourse. We ask 'what does it mean to see information literacy as a literacy?' To investigate this question, we examine literacy models and perspectives. As a result of doing so, we devise a model for information literacy that incorporates the literacy perspectives. The model applies not only to information literacy in higher education, but also to information literacy as a widely applicable social construct. The model we devise makes it possible to position the widening range of conceptual, empirical and practical contributions to information literacy within a broad theoretical framework.

This chapter is presented as three parts. Part 1 ('Literacy models and perspectives'), analyzes the literacy literature for the key paradigms through which the literacy discourse is operationalized and explains how the Generic, Situated and Transformative (GeST) windows for information literacy were developed. Part 2 ('The GeST windows') proposes our new model which identifies three perspectives on literacy and reframes them as the information literacy GeST windows. Part 3 ('GeST in practice') uses examples of higher education practice to show how the GeST windows can reveal the ways in which information literacy is enacted in curriculum. This part also provides recommendations for how curriculum can be designed to incorporate the windows.

Part 1. Literacy models and perspectives

Varying perspectives on literacy have been identified and discussed by a number of authors. Some have posited their own theories (Luke & Freebody 1999; Green 1988), while others have presented inductively derived models. Table 1.1 presents a selected chronology of literacy models that compares their essential characteristics. These characteristics can be associated with three different perspectives, which reveal literacy as:

1. a set of generic skills (behavioural);
2. situated in social practices (sociocultural); and
3. transformative, for oneself and for society (critical).

In Part 2 of this chapter, we will reframe the generic (behavioural), situated (sociocultural) and transformative (critical) perspectives of literacy as the GeST model for information literacy education. 'Generic' captures the functional literacy perspective of information literacy and places it within the generic skills discourse; 'Situated' captures the sociocultural elements of information literacy with an

authentic (professional, disciplinary) learning focus; and 'Transformative' captures the critical focus with more of an emphasis on the emancipatory nature of information literacy for the individual and society.

What does it mean to see literacy from the generic, situated and transformative perspectives? The generic perspective portrays literacy as 'functional' or 'basic' (Endres 2001, p. 401). In this perspective, literacy is regarded as a discrete set of skills to be learned by individuals. Literacy is not only the ability to read and write in order to decode labels and signs, to fill in forms and to read the newspaper, but also includes the ability to use information and communications technology such as the Internet for email, for finding information and for everyday transactions such as online banking. In the generic perspective, literacy is neutral, objective, text-based, apolitical, reproductive, standardized and universal. It is linked with worker productivity and a nation's economic development (Street 1984; Searle 1999). In vocational and higher education this perspective is seen in competency-based and generic skills curricula.

By contrast, the basis of a situated perspective is that literacy is fundamentally a social act, making literacy practices social practices. In this perspective, literacy is contextual, authentic, collaborative and participatory. Literacy involves individuals and groups making decisions, making meaning and solving personal, work, family and community problems. It is subjective, as what constitutes literacy practices will vary with the context and be different for each person and social group. In the situated perspective, there is not one single literacy, but many 'literacies' or 'multiliteracies', with multimodel dimensions including linguistic, visual, audio, gestural and spatial (Cope & Kalantzis 2000a).

The transformative perspective goes beyond sociocultural practices by being concerned with emancipatory processes and outcomes. The basis of a transformative perspective is that to be literate is for individuals and groups to be empowered to challenge the status quo and to effect social change. Within this view, literacy can be considered as critical, consciousness-raising, subjective, political, empowering and liberating (Freire 1970; Luke 2000; Powell, Chambers Cantrell & Adams 2001; Endres 2001).

Relationships between the perspectives

Table 1.1 is arranged to reveal the similarities between existing literacy models as incorporating the generic, situated or transformative perspectives. How do the models differ? Each model presents the relationships between the generic, situated

and transformative perspectives differently. These relationships are presented variously as: 1) separate, 2) opposing, 3) inclusive, and 4) as a continuum of literacy education practices. For example, Larson and Marsh (2005, p. 15) see the theories they present as a continuum. Street (1984) presents his model as binary and opposing. Green (1988) sees his model as intermeshed (interdependent), while Luke and Freebody (1999) see their 'four resources' model as a 'family of practices'. Some authors do not address the relationship between the perspectives in the models they present, so we assume they see them as distinct and separate (for example, Lytle & Wolfe 1989; Searle 1999; Papen 2005).

The presentation of the relationship between the perspectives in each of the models as separate, opposing, inclusive and as a continuum has profound implications for literacy education. For example, in Australia (and elsewhere) a debate is raging currently about how best to teach literacy in schools (Gannon & Sawyer 2007). The two models discussed are phonics and whole language, which are presented as distinct and opposing, rather than inclusive or as a continuum.

In order to address the binary and opposing nature of the literacy debate, we propose that literacy perspectives are more constructively seen as inclusive and hierarchical. For example, to take the perspectives of Lytle and Wolfe outlined in Table 1.1, to experience literacy as 'tasks', one would need to apply basic skills in everyday life. To experience literacy as 'practices', one would need to see that there are a range of contextual practices within which to apply skills and knowledge. To experience literacy as 'critical reflection', one would need to reflect upon the experience of applying skills and knowledge, and upon the personal, professional and social implications of applying skills and knowledge.

Therefore, it is possible to conclude that to experience literacy as transformative, one must have the capabilities associated with generic literacy. It is also possible to conclude that to see literacy *only* as generic is a limited view. In proposing a hierarchy we do not mean to suggest that the models are associated with stages, development or maturation. However, in learning contexts, a hierarchy suggests that curricula should attend to the full complexity of the literacy experience.

How are the generic, situated and transformative aspects of literacy evident in information literacy discourse and practice? Having presented some literacy perspectives, we now turn our attention to models of information literacy.

Table 1.1: Selected literacy models and perspectives

	Street (1984) separate - opposing	Green (1988) 'intermeshing'	Lytle & Wolfe (1989) separate	Luke & Freebody (1999) Freebody (1992) 'family of practices'	Searle (1999) separate	Papen (2005) separate	Larson & Marsh (2005) 'continuum'
Generic	Autonomous - individual - neutral - generic - objective - measurable - cognitive - deficit - economic productivity	Operational - individual - text-based - language-based	Skills - individual - neutral - generic - skills-based - atomistic - deficit Tasks - individual - activities	Coding competence - code breaker - how do I crack this? - individual - skill and drill	Autonomy - individual - neutral - generic - skills-based - atomistic - deficit Control - maintain status quo - mediated by authority - economic productivity Crisis - measurement & standards - deficit Technology - individual - skills - competencies - technical - measurement	Functional - individual - neutral - generic - skills-based - atomistic - deficit - economic productivity Liberal - individual - human right - personal development - deficit - work & leisure	
Situated	Ideological - social - subjective - contextualised - constructed by learners - multiliteracies - political	Cultural - constructing meaning - conxextualised - situated - authentic - socially constructed	Practices - social - authentic practices	Semantic competence - text participant - what does this mean? - individual - contextualised - constructing meaning Pragmatic competence - text user - what do I do with this here and now? - social	Right-social justice - individual - human right - personal development - empowerment Social practice - social - critical - authentic practices - making meaning - multiliteracies		New literacy studies - social - critical - authentic practices - making meaning - multiliteracies New technologies & literacy - social - authentic practices - multiliteracies Sociocultural-historical theory - social - authentic practices - participatory - collaborative - co-construction of meaning
Transformative		Critical - socially critical - political - transformative - production of knowledge	Critical reflection - critical theory - political - transformational - emancipatory	Critical competence - text analyst - what does this do to me? - decode - political - transformative	Social action/transformative - social - participatory - critical theory - political - transformational - emancipatory	Critical - social - participatory - critical theory - political - transformational - emancipatory	Critical literacy - social - participatory - critical theory - political - transformational - emancipatory

Merging literacy perspectives with information literacy models

Two dominant curriculum approaches for information literacy are represented in the standards and process models. The standards models, such as the US *Information literacy competency standards for higher education* (ACRL 2000) and the *Australian and New Zealand information literacy framework* (Bundy 2004a), consist of lists of skills, attributes, attitudes and knowledge. These models describe the information-literate person/student, thereby implying that information literacy consists of individual attributes or characteristics. The process models, such as the Information Search Process (Kuhlthau 1993) and the Big Six (Eisenberg & Berkowitz 1990), consist of a series of steps, stages and phases that the individual progresses through while seeking information.

In comparing the information literacy standards and process models to the literacy perspectives, we have found that they are more heavily weighted to the generic perspective, with some elements of the situated perspective. The situated aspects include the individual seeking meaning and creating personal relevance and an acknowledgement of knowledge as subjective, but they do not go as far as including social and collaborative aspects.

Critiques of the information literacy models, especially the higher education standards models, have highlighted the emphasis on the generic, rather than the situated and transformative. For example, Purdue (2003, pp. 660-1) critiques the 'mechanistic', 'utilitarian' and 'passive' way that information literacy is presented in the standards. He emphasizes the potential of information literacy in terms of social interaction and transformation. He criticizes the US *Information literacy competency standards for higher education* for seeing information literacy in terms of the individual: 'It is possible to read the ACRL Standards as a wholly individual set of actions; in fact, the word "individual" recurs throughout the document. If we want to emphasize the ability of IL [information literacy] to create an active citizenry, then the more that we can teach it within the context of a community, the better' (Purdue 2003, p. 660).

This idea of the individual versus the social, and of information literacy as transformative, is a theme that runs through the literature (Bruce 1997; Purdue 2003; Edwards & Bruce 2004; Lupton 2004). The critical literacy and critical information literacy movement has also critiqued conventional notions of literacy as individual, in favour of the social (Kapitzke 2003a; Luke 2000). The idea of the social includes seeing information literacy both as a social practice and as a way of transforming society. Hence, it is not until information literacy is seen as a social practice that it can then be transformational.

The basis of the generic, situated and transformative perspectives for information literacy can also be seen in our previous work, *Six frames for information literacy education* (Bruce, Edwards & Lupton 2006). The six frames encompass:

- knowledge about the world of information (content frame)
- a set of competencies or skills (competency frame)
- a way of learning (learning to learn frame)
- contextual and situated social practices (personal relevance frame)
- power relationships in society and social responsibility (social impact frame)
- a complex of different ways of interacting with information (relational frame) (Bruce, Edwards & Lupton 2006, p. 6)

In the 'six frames' paper we argue that:

> People's approaches to IL [information literacy] and IL education are informed by the views of teaching, learning and IL which they adopt either implicitly or explicitly in different contexts. IL educators, including discipline-based academics and librarians are challenged daily by an environment in which administrators, teaching colleagues, students and others bring very different perspectives to the processes of IL education (2006, p. 1).

Not only can different models of information literacy explain particular practices, but they can also be used as an explicit framework to design curriculum. In Table 1.2 we have juxtaposed the 'six frames' and the standards and process models against the Generic, Situated and Transformative perspectives of the literacy models, thereby arriving with the GeST model for information literacy.

Table 1.2: Selected information literacy models

	Process Eisenberg & Berkowitz (1990) Kuhlthau (1993)	Standards ACRL (2000) Bundy (2004a)	Six frames Bruce, Edwards & Lupton (2006)	
Generic	- universal information seeking process	- discrete skills - neutral - individual - deficit	**Competency** - individual - skills-based - sequenced instruction - objective - measurable - deficit	Relational – a complex of different ways of interacting with information
	- individual seeks information to make meaning	- individual seeks information to make meaning - individual's awareness of sociocultural issues regarding use of information	**Content** - objective - discipline-based - content is transmitted - measurable	
Situated			**Learning to learn** - subjective - collaborative - participatory - authentic practices **Personal relevance** - subjective - personal development - learner makes meaning - self-directed - contextualized - authentic practices	
Transformative			**Social impact** - social - political - emancipatory - critical	

Part 2. GeST windows

In the 'six frames' paper, we drew the frames from the discourse on curriculum models (Eisner & Vallance 1974; Kemmis, Cole & Suggett 1983; Pratt 1998; Toohey 1999). In this chapter, we have explicitly used the literacy models as our source. This has resulted in the creation of the GeST windows based around the essence of the literacy models and amalgamated with the 'six frames' for information literacy education. In each of the GeST windows we have illustrated how the window is viewed through a number of dimensions. These dimensions include: finding and using information; the nature of information; how information literacy is taught and learned; and why information literacy is deemed important as an outcome of higher education. Our selection of these dimensions is based upon our previous information literacy research (Bruce 1997, 2008; Lupton 2004, 2008).

It should be noted that the essence of the GeST windows can be applied to any teaching and learning context; here, however, we have chosen to view information literacy through the windows in order to see information literacy from different perspectives and to highlight the role of the literacy models in information literacy theory and practice. So how is information literacy in higher education seen when looking through the GeST windows?

Generic window

Looking through the Generic window (see Table 1.3), information literacy is seen as a set of discrete skills and processes used for finding and managing information. These skills and processes are observable and measurable. Information is external, as it exists in tools and databases ready to be extracted, and the individual using the information does not affect the information. Information is commonly evaluated by using evaluation checklists and by looking at surface signs of authority including currency, bias and provenance. Information literacy is taught in stand-alone library classes. The content of the classes includes topic analysis, search terms (synonyms and related terms), Boolean operators, constructing search strings, rules of citing and referencing and information and communication technology (ICT) skills. Information literacy is assessed through standardized tests and online tutorials.

Table 1.3: Generic window

Information literacy is...	a set of cognitive skills and processes that individuals use for finding and managing information
Information literacy is important because...	we need a flexible workforce to be competitive in a globalized, technologized world
We find information by...	using search strategies
We use information to...	evaluate, manage and organize information
Information consists of...	text and images that are accessed and managed via tools
Information is regarded as ...	external and objective
Information is evaluated by...	examining currency, bias, authority, provenance
Information literacy is taught by...	practising: search strategies, Internet evaluation checklists, ICT skills, citing and referencing in generic workshops and lectures
Information literacy is learned by...	practising search skills and following a series of stages
Information literacy is assessed by...	standardized tests, including online tutorials

Situated window

The Situated window includes the skills and processes of the Generic window. Within the Situated window (see Table 1.4), information literacy is regarded as a range of contextualized information practices (discipline-based, work-based, family-based and community-based). Information is found through purposeful search strategies, but also by encountering information. A common way of finding information would be to ask a person. Information is a range of stimuli, including embodied sensory information (touch, smell, hearing), textual information (images, text) as well as ideas, opinions and points of view. Meaning is constructed through engaging with information. Information is personal and, therefore, internal and subjective. It is social, as it has different manifestations and meanings in different social and cultural contexts. Information is evaluated by examining the meaning that it has for the individual and for the social group. Information is regarded as having different meanings in different disciplinary, professional, community and indigenous contexts, and the knowledge that is produced, stored and passed on will have different meanings in these contexts. Information literacy is taught by engaging in the authentic information practices of the discipline, profession and community. Information literacy is assessed by examining the process and outcome of engaging in authentic information practices.

Table 1.4: Situated window

Information literacy is...	a range of contextualized information practices (discipline-based, work-based, family-based and community-based)
Information literacy is important because...	we need to be able to find and use information for personal, work and community purposes
We find information by...	asking people, observing people and phenomena, using tools
We use information to...	create new knowledge, solve problems
Information consists of...	opinions, ideas, text, images and aural, visual, affective, kinaesthetic and embodied stimuli
Information is regarded as ...	internal and subjective
Information is evaluated by...	examining: multiple sources of information, and how information is produced and communicated, the social, historical, cultural, political and economic context of information
Information literacy is taught by...	providing authentic information practices in contextualized settings
Information literacy is learned by...	engaging in authentic information practices
Information literacy is assessed by...	the process and outcome of engaging in authentic information practices

Transformative window

The Transformative window includes the skills and processes of the Generic window and the authentic social practices and personal meaning and relevance of the Situated window. Within the Transformative window (see Table 1.5), information literacy is seen as a range of information practices used to transform oneself and society. Information and knowledge are questioned by asking: Who generated the information? For what purposes? Whose interests are served? Who is silent? What are the assumptions inherent in the information (for instance, the author's perspective, the way the information has been packaged and presented)? Information is viewed as ideological and using information is political. Information literacy is taught by empowering learners to critique information in order to challenge the status quo, and is assessed by the process and outcome of this critique and activism.

Table 1.5: :Transformative window

Information literacy is...	a range of information practices used to transform oneself and society
Information literacy is important because...	we need to be empowered to challenge the status quo
We find information by...	using a variety of lenses with which to view information and knowledge production
We use information to...	question the status quo, challenge existing practice, empower oneself and the community
Information consists of...	the implicit and explicit meanings and assumptions inherent in textual and social practices
Information is regarded as ...	internal and subjective
Information is evaluated by...	examining: whose interests are served, who is silent, inherent assumptions, how knowledge and information are produced, and what counts for knowledge
Information literacy is taught by...	empowering learners to engage in information practices for the transformation of society
Information literacy is learned by...	engaging in collaborative and participatory information practices that critique society and lead to social action
Information literacy is assessed by...	the process and outcome of social critique and action

We see transformative information literacy as the most inclusive, because it includes the Generic and Situated windows (see Table 1.6 for an overview). The Transformative window also has an emphasis on outcomes for the individual and society, in contrast to the Generic window which focuses on skills and processes for the individual, and the Situated window which focuses on content and context. It should be noted, however, that the Transformative window is the most difficult and contested perspective, a problem we will discuss later.

Table 1.6: GeST windows

	Generic window	Situated window	Transformative window
Information literacy is...	a set of cognitive skills and processes that individuals use for finding and managing information	a range of contextualized information practices (discipline-based, work-based, family-based and community-based)	a range of information practices used to transform oneself and society
Information literacy is important because...	we need a flexible workforce to be competitive in a globalized, technologized world	we need to be able to find and use information for personal, work and community purposes	we need to be empowered to challenge the status quo
We find information by...	using search strategies	asking people, observing people and phenomena, using tools	using a variety of lenses with which to view information and knowledge production
We use information to...	evaluate, manage and organize information	create new knowledge, solve problems	question the status quo, challenge existing practice, empower oneself and the community
Information consists of...	text and images that are accessed and managed via tools	opinions, ideas, text, images and aural, visual, affective, kinaesthetic and embodied stimuli	the implicit and explicit meanings and assumptions inherent in textual and social practices
Information is regarded as ...	external and objective	internal and subjective	transformative
Information is evaluated by...	examining currency, bias, authority, provenance	examining: multiple sources of information, and how information is produced and communicated, the social, historical, cultural, political and economic context of information	examining: whose interests are served, who is silent, inherent assumptions, how knowledge and information are produced, and what counts for knowledge
Information literacy is taught by...	practising: search strategies, Internet evaluation checklists, ICT skills, citing and referencing in generic workshops and lectures	providing authentic information practices in contextualized settings	empowering learners to engage in information practices for the transformation of society
Information literacy is learned by...	practising search skills and following a series of stages	engaging in authentic information practices	engaging in collaborative and participatory information practices that critique society and lead to social action
Information literacy is assessed by...	standardized tests, including online tutorials	the process and outcome of engaging in authentic information practices	the process and outcome of social critique and action

Part 3. GeST in practice

Having presented the GeST windows, we now look at how the windows are represented in practice. We present examples of two distinct university courses: a first-year course, Resources, Environment and Society, and a third-year course, Accounting for Tax. These examples have been chosen because they were the subject of earlier research by Lupton (2004, 2008). They are presented here with an analysis of how the generic, situated and transformative aspects of information literacy are enacted in each course. It is important to note that the courses were not explicitly designed using the GeST windows, but we are now using the windows to view information literacy education. The courses were designed, however, with the general philosophy that information literacy should be taught within a course and disciplinary context rather than in stand-alone library-based classes. This philosophy of embedding information literacy in the curriculum belongs to the Situated window.

Example 1. Resources, Environment and Society

Resources, Environment and Society is a first-year interdisciplinary environmental studies course, incorporating geography and sociology. The course description states:

> The course will examine different ways of conceptualising the nature of resources, the environment and society. The contrasts and connections between scientific and social science theory and methods will be examined. Key factors mediating the inter-relationships between society and environment will be explored including resource use, population and technological change. Other key concepts critically explored will include social justice, equity and sustainability. These issues will [be] explored through case studies of the international dimension of global climatic change, water and land degradation and biodiversity conservation (Baker & Greig 2002).

The assessment for the course consists of:

- *Essay*: Students research their choice of environmental problem (e.g. dry land salinity, waste management, water management, deforestation) with which to address the essay question 'Managing resources is about managing people, not resources'. The essay is completed with a staged approach: searching for resources on essay topic; submission of an annotated bibliography on essay sources; submission of an essay outline/draft for peer

review; submission of final essay; and individual consultation with tutor to discuss essay feedback.

- *Learning portfolio*: collection of lecture and tutorial notes, field trip notes and illustrations, reflections on learning
- *Tutorial presentation*: the student describes what they had learned about learning and doing research, and the main points and concepts of the course

There is no textbook and few readings are supplied. Students are required to constantly interact with information through the use of the course web site and online lecture notes that contain numbers of web links. There is a strong focus on different ways of seeing environmental resources from social, cultural, scientific, historical and political perspectives. The course features a weekly panel discussion where representatives from various groups, including the indigenous community, government, research and environmental groups, present their views on environmental issues and are questioned by the students. Tutorial activities include role-play and case studies.

Throughout the course, students are constantly required to challenge their own beliefs in relation to different ways of seeing environmental problems. For example, a tutorial activity includes a case study where students are presented with a number of different views concerning the hunting of whales by the Japanese Makah people. Students are required to discuss the issue in the tutorial and write their personal position on the issue in their learning portfolio. The course included the three GeST windows as outlined below.

Generic window

Teaching and learning activities include tutorials and lectures on learning PowerPoint, oral presentation skills, critical reading and referencing, search strategies for using library databases and searching the web. A generic evaluation checklist is recommended to evaluate web-based information. The primary emphasis is on preparing students for their academic career, in terms of finding information and developing essay-writing skills.

Information is codified and resides in databases and the web, computer software and in the rules of academic writing and referencing. Generic academic conventions are presented as academic literacies necessary for success at university. The purpose of these activities is to enable students to find and use information for their assignments and for the course.

Situated window

Teaching and learning activities include:

- Field trip: 'reading the land'—an examination of forestry practices and development practices and their impact on the environment and community
- Lecture panel sessions: contrasting perspectives (government, lobby groups, industry, indigenous) presented on particular environmental issues
- Tutorial discussions—for example, about whale hunting, as mentioned above

Information is seen as the geography and history of a landscape, as contrasting perspectives, as ideas and making meaning. Information is found by looking, listening and feeling. It resides in the landscape, in people and, as codified information, in text.

Academic conventions are presented within the context of the discipline and the topic. Authentic practices include role-play. However, there is little acknowledgment of professional practice beyond a discussion of career pathways in environmental science.

Transformative window

The purpose of the teaching and learning activities is to facilitate students' questioning environmental policy and practice and to learn to discriminate the different perspectives on an environmental issue. There is no clear right and wrong about environmental issues, and it is up to the individual and community to take action to save the environment.

The course orientation is strongly socially critical and includes discussion of personal and political action. The theme of social responsibility is reflected in tutorial presentations at the end of semester, when many students speak of wanting to get personally involved in helping solve environmental problems

The analysis of information includes an examination of the assumptions inherent in the use of statistics and the examination of the ideologies behind the contrasting perspectives offered by government, Greens, industry and indigenous groups.

Example 2. Accounting for Tax

Accounting for Tax is a third-year course for students in a business degree program. It covers Australian taxation law within a framework of government policy relating to wealth distribution. The course description states:

> Understanding the principles of taxation is important to students both in their personal lives and professional careers. While students may not pursue a career solely in tax, the course will develop their appreciation of the wide implications that tax can have on individual, corporate and government decisions. The course endeavours to achieve this by providing students with relevant real life examples of the taxation law's application. The aim of the course is to ensure that students have a grounded content knowledge of Australian taxation law in relation to advance taxation aspects, combined with the ability and confidence to research to ascertain the current status of the law (Freudenberg 2005).

Information literacy is an explicit outcome of the course. There is a prescribed Australian taxation law textbook and a number of recommended readings relating to Australian tax law.

Assessment:

- *Essay*: research essay addressing particular legislation (from a list of choices), its evolution, amendments, critique of the legislation and the students' recommendations for reform of the legislation. A process approach was encouraged, and students were required to submit an introduction, conclusion and bibliography early in the semester.
- *Letter to a client*: Students write a letter of advice to a client based upon a set scenario.
- *Tutorial preparation*: spot checks of answers to pre-set tutorial questions twice in semester.
- *Tutorial oral presentation*: students prepare a presentation on a nominated tax planning topic for a nominated audience: 1) sophisticated client (large business); 2) unsophisticated client (small business); 3) conference for tax professionals; 4) university students; 5) public seminar.
- *Exam* (open-book): identification of taxation issues and application of taxation law.

The course includes the three GeST windows, but is primarily focused on the Generic and Situated windows.

Generic window

Teaching and learning activities include optional workshops on: finding and using Australian tax information (legislation, case law, scholarly journals, professional journals, government information); giving oral presentations; and essay writing. A template is provided for writing the letter of advice to the client. Students are required to learn and use the Chicago referencing style. The content to be learned includes search strategies, useful web sites and databases, topic analysis, essay writing and structuring, and the skills to give an effective oral presentation.

Information is seen as codified and resides in databases and the web. The purpose of the teaching and learning activities is that students develop academic literacies to succeed at university.

Situated window

Teaching and learning activities include practising forms of professional communication, including a seminar and letter of advice to a client. In tutorials, students use information to solve professional issues. These activities are intended to give students experience of professional tax accounting practice. The general aim of the course is that students build on their generic skills and situate them in professional practice.

Information is seen as codified text, ideas, opinions, information about the client's situation, and information from professional colleagues. Information resides in people and in databases, scholarly journals, professional journals and web sites. Students are encouraged to analyze the evolution of particular legislation, by accessing information such as including Bills, Senate Select Committee documents, speeches in Parliament, and amendments.

Transformative window

It is important to note that whether or not this perspective is seen depends on the students' choice of essay topic, as they are required to examine discrimination inherent in legislation, including direct and indirect discrimination towards women and same-sex couples. Only those students who choose those topics that have a socially critical emphasis are likely to experience the Transformative window.

In their essay, students critique Australian government policy and its effect on wealth distribution. This perspective looks beyond the individual to the effects of

government law and policy on society. Information is seen as ideas, opinions, ideology, law and policy. Information resides in people and in databases, scholarly journals, professional journals and web sites. Absent from the students' approach to the essay is the analysis of codified textual information for the assumptions inherent in the information, the interests served and who is silent. Also absent is an analysis of the political ideology driving legislation and government policy.

Using the GeST windows

In the above section, we have analyzed information literacy practices in two courses for the Generic, Situated and Transformative windows. We have shown that the two examples include elements of all three windows to a greater or lesser extent.

We argue that to achieve holistic information literacy (and literacy) education, all three windows should be present in curricula. Therefore, we present the GeST model as a tool that can be used to analyze existing curricula and to design new ones. We suggest that the following questions be asked of curricula:

- What information finding and using skills and processes do students need to learn in order to succeed at university?
- What information finding and using skills and processes do students need to learn in order to prepare them for disciplinary/professional practice?
- What information sources are important for university success, disciplinary/professional practice, individual development and community development?
- What information and knowledge need to be created to identify and solve disciplinary, professional, individual and community problems?
- What teaching and learning activities can be used to question the assumptions inherent in information, to ask whose interests are served, to ask how and why the information has been produced, to question the nature of knowledge in the discipline/professional practice and community, and to ask who is silent?
- What teaching and learning activities can be used to see how disciplinary/professional practice impacts upon the individual and society?
- What teaching and learning activities can be used to challenge the status quo in one's life, in the discipline, in the professions and in society?

In advocating the GeST windows, we are assuming that the nature and purpose of higher education (and, therefore, information literacy as one if its outcomes) is not

only for individual transformation, but for the transformation of society. We have said earlier that the Transformative window is the most difficult and contested. Our professional roles in our respective universities include working with academic staff to improve their teaching and their students' learning. In our work as academic developers we have presented the Transformative window as a curriculum and teaching orientation. We have found that this window is often criticized by our colleagues as being overtly political, value-laden and ideological. We find it notable that our colleagues do not see that the Generic window is equally political, value-laden and ideological in the way it serves the interests of governments, funding bodies and employers. For instance, if information literacy is a set of generic skills, then it should be taught easily and cheaply in stand-alone, pre-packaged, decontextualized classes. If it is grounded in social practices, then it should be taught in relation to disciplinary, professional and community practices, which may include more subjective (therefore harder to quantify) and more expensive research-based experience, field work, community involvement and professional practicum experience. If information literacy is seen as transformative, then it should be taught so that learners are empowered to challenge and question social norms, governments and employers.

We see the Transformative window as illustrative of the maturing discourse surrounding information literacy. It supports the view that the goal of information literacy education should to be to encourage social critique (Kapitzke 2003a, 2003b; Pawley 2003; Purdue 2003; Bundy 2004b, 2004c; Simmons 2005; Whitworth 2006). While some authors call for 'critical information literacy' as if it is separate from more commonly practised views of information literacy, we believe that the strength of the GeST windows model is that it presents the Transformative (that is, critical) window as being inclusive of the Generic and Situated window rather than being separate.

Conclusion

Although the relationship between information literacy and literacy is complex and dynamic, it is possible to bring these concepts together in the GeST windows. We argue that the generic view of information literacy as neutral, objective, individual, measurable, discrete and separate from disciplinary knowledge and professional practice would limit students' ability to learn for an 'unknown future' (Bowden & Marton 1998). By contrast, the situated and transformational view of information literacy as value-laden, subjective, holistic, critical and situated in social and professional practices would empower students to be 'active designers—makers of social futures' (Cope & Kalantzis 2000b, p. 7). The tension evident between the

three windows can be reconciled if they are seen as inclusive and hierarchical and where information literacy is a 'complex of different ways of interacting with information' (Bruce, Edwards & Lupton 2006, p. 19). Curricula should, therefore, reflect the three windows and not be limited to the Generic window.

It also seems that transformative information literacy is relevant not only in Freire's (1970) activism against oppression in the developing world, but also for Western twenty-first century democratic societies. As Alan Bundy argues, information literacy education needs to 'move beyond the generic skills development...[to]...the development of information-literate and questioning people able to learn for life—but as important is the need to sustain open societies which, post September 11 2001, will surely be under increasing duress' (Bundy 2005, p. xix).

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