

Critical Literacy and New Technologies

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Introduction

In the recent past it has been common for educators concerned with promoting critical literacy as an educational goal to think in terms of more or less "discrete" conceptions, practices, or types of literacy - of which critical literacy is one. This approach has, indeed, been part of a scene characterised by influential competing traditions of literacy theory and practice during the past 15 years or so: notably, discourses of functional, cultural and critical literacy (Lankshear 1991).

One quite direct outcome of this kind of thinking for curriculum has been a growing tendency in several Australian state systems toward amalgamating multiple components corresponding to these discourses into literacy education programs and syllabi. Increasingly, we find within subject English, or Language Education, attention being given to core or functional literacy conceived as print mastery (often involving competing or complementary pedagogical approaches such as phonics, drill and skill, whole language methodologies, process writing and the like), alongside literature (conceived as familiarity with a literary canon - although people like E.D. Hirsch have worked with much wider conceptions), and critical literacy (variously conceived as applications of critical thinking to texts, versions of critical social literacy, applications of genre theory, and so on).

Our own local state English syllabus - the Queensland Years 1 to 10 English syllabus - evinces an attempt to organise such qualitatively distinct "literacies" under a burgeoning conceptual and theoretical umbrella. It employs five organising principles in an attempt to accommodate and legitimate diverse literacy goals and visions within a single syllabus statement (DEQ 1994). The result is a syllabus which many regard as unwieldy, if not incoherent, bursting at the seams, and often palpably unsuccessful in its own terms at the level of classroom implementation.

Recently, a research project in which we have been involved - which investigates the interfaces between technology, literacy and learning - has worked with a different approach to understanding literacy in general and critical literacy in particular. This is an approach which aims to transcend the earlier kind of compartmentalised view. It develops a sociocultural view of literacy as necessarily involving three dimensions: "operational", "cultural", and "critical" (Green 1997a, 1997b; Lankshear, Bigum et al. 1997, ch. 2).

From a sociocultural perspective, literacy must be seen in "3D", as having three interlocking dimensions - the operational, the cultural, and the critical - which bring together language, meaning and context (Green 1988: 160-163; Green 1997a, 1997b). An integrated view of literacy in practice and in pedagogy addresses all three dimensions simultaneously; none has any necessary priority over the others.

The operational dimension refers to the "means" of literacy, in the sense that it is in and through the medium of language that the literacy event happens. It involves competency with regard to the language system. To refer to the operational dimension of literacy is to point to the manner in which individuals use language in literacy tasks, in order to operate effectively in specific contexts. The emphasis is on the written language system and how adequately it is handled. From this perspective, it is a question of individuals being able to read and write in a range of contexts, in an appropriate and adequate manner (bid; Lankshear, Bigum et al. 1997).

The cultural dimension involves what may be called the meaning aspect of literacy. It involves competency with regard to the meaning system (Lemke 1984). This is to recognise that literacy acts and events are not only context specific but also entail a specific content. It is never simply a case of being literate in and of itself but of being literate with regard to something, some aspect of knowledge or experience. The cultural aspect of literacy is a matter of understanding texts in relation to contexts - to appreciate their meaning; the meaning they need to make in order to be appropriate; and what it is about given contexts of practice that makes for appropriateness or inappropriateness of particular ways of reading and writing. Take, for example, the case of a worker producing a spreadsheet within a workplace setting or routine. This is not a simple matter of "going into some software program" and "filling in the data". Spreadsheets must be compiled - which means knowing their purpose and constructing their axes and categories accordingly. To know the purpose of a particular spreadsheet requires understanding relevant elements of the culture of the immediate work context; to know why one is doing what one is doing now, how to do it, and why what one is doing is appropriate (Green 1988: 160-163; Green 1997a, 1997b).

The critical dimension of literacy has to do with the socially constructed nature of all human practices and meaning systems. In order to be able to participate effectively and productively in any social practice, humans must be socialised into it. But social practices and their meaning systems are always selective and sectional; they represent particular interpretations and classifications (Green 1997a, 1997b; Lankshear, Bigum et al 1997). Unless individuals are also given access to the grounds for selection and the principles of interpretation they are merely socialised into the meaning system and unable to take an active part in its transformation. The critical dimension of literacy is the basis for ensuring that participants can not merely participate in a practice and make meanings within it, but can in various ways transform and actively produce it (bid).

From a sociocultural perspective, any concern with reading, writing, literacy, inevitably ends up at social practices which integrate talk, action, interaction, values, beliefs, goals, purposes, aspirations, ideals, ways of behaving, and so on. That is, reading and writing as meaningful practice is always inherently bound up with some way or ways of being in the world. The tools or technologies of literacy (from print to computers) are always situated and employed within contexts of practice which permit certain productions of meaning and constrain others (see Gee, Hull and Lankshear 1996: 2-3).

A closer look at the critical dimension

The critical dimension involves at least three pedagogical aspects.

- Developing critical perspectives on literacy per se.
- Learning how to critique specific texts.
- Learning how to read Discourses critically.

Three preliminary points are important here.

First, our position builds on James Gee's (1991, 1993, 1996) account of Discourses and their relationship to literacies. Discourses are combinations of ways of acting, thinking, feeling, believing, dressing, gesturing, valuing, behaving, speaking, reading and writing, and so on. To be in a Discourse means that others - who are familiar with the Discourses - can recognize us as being a "this" or a "that" (e.g., a lawyer, mother, teacher, netballer, carpenter), or a particular "version" of a this or a that (e.g., a courtroom lawyer, a traditionalist teacher, progressivist teacher, beginning teacher, a "middle class" mother, a jobbing carpenter, a social netballer etc.). They can recognize us as such by virtue of how we are speaking, reading, writing, believing, valuing, feeling, acting, gesturing, and so on. Language is a dimension of Discourse, but only one dimension, and Gee uses discourse (with a small "d") to mark this relationship. While in his more recent work Gee defines literacy in terms of mastering Discourses (Gee 1996), we lean here toward his earlier view whereby literacy refers to mastery of the language uses of secondary Discourses (i.e., Discourses associated with social institutions and networks beyond one's immediate, or face to face, kinship group).

Second, mastery of the critical dimension of literacy requires access to relevant forms of operational and cultural competence. Most obviously, we cannot produce critical readings and (re)writings of specific texts without the necessary operational capacities for accessing those texts and for framing and communicating our critical response. With conventional printed texts/typographic signs this presupposes at least requisite encoding and decoding skills. With digital texts it will presuppose also access to a range of operational capacities with relevant hardware and software applications and procedures. Beyond this, it is clear also that we cannot adopt critical stances toward literacy per se, or toward entire Discourses, without cultural understandings of social practices and the work done within them by language and literacy. In addition, of course, being able to read Discourses critically requires having criteria, ideals, alternative experiences and standpoints, values, and the like, on the basis of which we can build on our cultural understanding of a Discourse to critique it.

Third, in our own experience, critical literacy activity within classrooms is most often confined to teaching and learning aimed at critique of specific texts - typically from some literary or aesthetic standpoint (e.g., via reader response, literary criticism, textual deconstruction) and/or some kind of "social" standpoint (e.g., addressing sexist or racist language in texts). This is hardly surprising given the "schoolish" nature of classroom learning, where "subjects" define the scope of learning (as) practice, and where school

practices are substantially divorced from >mature= (or "insider") versions of everyday practices to which they loosely correspond: c.f., "writing reports" as compared to "being a reporter"; "doing math or physics" as compared to "being a mathematician or physicist" (see Gee, Hull and Lankshear 1996: 4, 15-16).

Discourses, literacies and new technologies

Pedagogy concerned with critical literacy and new technologies is starting from a long way back. Many teachers and, indeed, many teacher educators, are simply not conversant with operational and cultural aspects of new technologies and their associated social practices and literacies. Predictably, we find considerable energy being given over to classroom activity aimed at merely getting to grips with operational aspects of new technological literacies. Where attempts are being made to do critical literacy work with digital texts, it often takes the form of reducing digital texts to equivalents of typographic texts and dealing with them in much the same ways that conventional texts are treated critically: viz., via literacy or aesthetic readings; detecting sexist or racist language, commenting on generic aspects of the text; rewriting the text from different perspectives (the big bad wolf=s point of view), etc.

The extent of the challenge facing critical engagement with literacy in the new technologies era is evident in a recent observation by Manuel Castells (1996: 328). Castells speaks of the current technological revolution having created a "Super Text and a Meta-Language" that integrates "the written, oral and audio-visual modalities of human communication" into a single system for the first time in human history. According to Castells, the increasing integration

of text, images, and sounds in the same system, interacting from multiple points, in chosen time (real or delayed) along a global network, in conditions of open and affordable access, does fundamentally change the character of communication. And communication decisively shapes culture, because as Postman writes, "we do not see Y reality Y as "it" is, but as our languages are. And our languages are our media. Our media are our metaphors. Our metaphors create the content of our culture." Because culture is mediated and enacted through communication, cultures themselves, that is our historically produced systems of beliefs and codes, become fundamentally transformed, and will be more so over time, by the new technological system (Castells 1996: 328. The reference is to Postman 1985: 15)

Some implications for critical perspectives on literacy per se

What is this new meta-language? What does it do or enable that the previous "language" did not and could not? What does it mean so far as classroom literacy practices are concerned?

What kinds of (new) practices does this new "meta-language" mediate, and how does it mediate them?

What values are "encoded" in this >meta-language= and the practices associated with it? What sorts of commitments and beliefs does it and its associated practices enlist on our part?

What forms of identity and subjectivity does it encourage, enhance, enable? And with what actual and potential consequences?

What can we say about the way it mediates human relationships and social relations?

What operational and cultural forms of knowledge, understanding, proficiency are called out by the new "meta-language" and the conditions of digital text production, distribution and exchange?

Some implications for critical reading of Discourses

Some of the most important issues associated with new technologies and their associated practices and literacies are largely "hidden". But we do well to seek them out as best we can. The point here is that from a sociocultural perspective, texts and text production within larger Discursive practices always mean in a much larger sense than linguistic, aesthetic, literary, and "communicational" ways alone. They also mean existentially, in ways that can impact deeply on human interests and well-being. A couple of examples must suffice, but they are enough to give us a clear sense of some of what is at stake in learning how to make critical readings of Discourses.

The first example relates to claims made about the importance of new technologies and technological literacies in enhancing productivity and efficiency - getting more done better quickly. Some important issues about the relationship between pursuit of productivity gains and what is sometimes referred to as "articulation work" arise here - especially during the early stages of a new technology being introduced. Chris Bigum (Bigum and Lankshear 1997) refers to the work of Ursula Franklin (1990) in this context. Franklin notes the highly gendered nature of a good deal of articulation work: that is, the work of engineering new technologies into sites of social practice and making it work. Articulation work is often invisible, but it is what holds systems together and enables them to function. The people who are actually engineering new technologies into work spaces are the one's who are going to be engineered out of jobs as their reward for actually making it work. There are plenty of examples of the social adoption of technologies where women have played crucial roles in engineering them into the social fabric. Telephones are a classic example. Franklins book, *The Real World of Technology*, provides a telling account of the roles women played in terms of building the telephone to the point where it is now a routine part of our lives. The reward for those people (read "women") who ran the party lines, and the operators themselves, was to be increasingly displaced by automatic systems of one kind or another. Much, if not most, of the current articulation work of engineering new technologies into formal educational spaces is being done by women.

A second example concerns a factory that had been made over into high tech space. The worker were women, primarily, working in a closed space. The windows had been closed out. The workers were not allowed to talk or drink, although they could have candy to eat. Their job was processing donations that came in for charitable causes and their work was closely monitored. They had to process three envelopes a minute. Those who were key pressing had to complete around 185000 strokes an hour. The enterprise, located in the US, was basically a high tech sweat shop. This example indicates how when it comes to issues relating to the intersection of technologies and literacies, we cannot afford simply to think purely in instrumental terms: "I'm just going to do a job using the software as means to an end; it's just a tool" kind of approach. The "new frontier" can be a dangerous space. Ordinary individuals are playing bit parts on a very big screen in a game where they/we have do not have much control or leverage. We may think we do because we can drive on the Internet. But to make that assumption is akin to the analogy offered by Langdon Winner (1989) when he said that to imagine that a PC is any match for what the large players can put into operation is a bit like imagining your hang glider is some sort of competition for the US Air Force. The issues attending the introduction of new technologies have far-reaching and often invisible implications, which present worthy subject matter for practices of critical literacy (Bigum and Lankshear 1997).

Implications for critique of digital texts

With respect to critical scrutiny of digital texts, it again quickly becomes apparent that our notion of texts has to be enlarged considerably beyond that of conventional (typographic) texts which have long been seen as the province of "literacy". Here again, the importance of adopting a sociocultural view of literacy is readily apparent, especially as multi-media texts operated within cyberspace increasingly displace conventional print varieties in the everyday experiences and practices of people in societies like our own.

Critical analysis of particular texts or combinations of texts is inseparably connected to critical understandings of literacy per se and critique of Discourses. This is because literacy - being embedded in social practices - is fundamental to how social worlds are is "made" and how people fare within the worlds that are made. While all critical literacy, as we conceive it here, proceeds from this basis, critical literacy does not comprise some single definitive approach. Rather, it marks a broad "coalition of educational interests committed to engaging with the possibilities that technologies of writing and other modes of inscription offer for social change, cultural diversity, economic equity, and political enfranchisement" (Muspratt et al 1997: 1).

Critical literacy educators pursue "prescriptive models" of "the literate person" and "the social" (bid: 2). They give a distinctive twist to a sociocultural view of literacy by the way they understand "the social" as a domain of practice. They define the social as "a practical site characterized by contestations over resources, representation, and difference" (bid: 3). That is, the domain of everyday practice is framed as contexts within which material and discourse resources are disputed, and where different groups and individuals do not have equal access to "representational systems and mediational means", to "linguistic knowledge", to "cultural artifacts", nor to "actual financial capital",

"institutional entry", or "status" (ibid.). Still less do varying groups and individuals have equal access to social, cultural, and economic means (power) to determine what (shall) count as (recognized or accepted - that is, "hegemonic") norms or criteria whereby hierarchies of allocation and status among these various social "goods" (Gee 1991) are established and maintained; and, hence, to their actual distributions within daily life.

From this standpoint, texts - forms of inscription, whether typographic, digital or other - are instances of "naming the world" (Freire 1972): "moments" in the intricate practices and processes whereby "what counts" is established and reinforced (transmitted, enculturated, learned), and where norms and criteria shaping access and allocation are played out and resisted. Texts are, precisely, invitations to explore these things and to engage in cultural action to "rewrite" them differently: to reveal them and contest them. Critical readings of texts aim to unveil the representational and other material effects of texts, and critical rewritings of texts are "moves" to redress these effects by encoding alternative possibilities.

At a general level, critical scrutiny of texts may be seen as engaging (learners) in "ideology critique" - to invoke an old and often disparaged notion - understood in light of Gee's (1996) account of "ideology". Gee defines "ideologies" as social theories which involve

generalizations (beliefs, claims) about the way(s) in which goods ["anything that the people in the society generally believe are beneficial to have or harmful not to have", such as "life, space, time, 'good' schools, 'good' jobs, wealth, status, power, control, or whatever"] are distributed in society. When I say "involves" I mean that the theory either contains generalizations directly about the distribution of goods or, at least, generalizations which imply claims about the distribution of goods. (Gee 1996: 21; the inserted quotation is also from page 21)

Texts which are of interest to critical literacy educators encode ideologies, more or less explicitly or tacitly. For example, a text which represents women/womanhood in a particular way is saying something or other about what it means to get "being a woman" right (or, by implication, wrong) and, to that extent, about how women get or fail to get "goods" attaching to or associated with being a woman. The same applies to texts which represent what counts as being literate, successful, "with it", rich (or poor), qualified (or unqualified), competent (or incompetent), and so on and on.

Reading texts critically, including our own texts, is about bringing their theories about distributions (ideology) into the open, addressing our participation in or complicity with them, and working to "remove our moral complicity" with them (Gee 1996: 21) to the extent that they are self-advantaging and, therefore, and to the same extent, disadvantaging of others.

More specifically, critical reading employs diverse techniques to get at their representations and constructions of "reality". These include such tasks as identifying the ideal reader of the text: that is, what kind of reader would find this text unproblematic

(would be "in sync" with it)? What would they believe, value, espouse, etc.? This is to identify the "subject position" the text is inviting its readers to take up (Luke 1992). Similarly, we may investigate the "possible world" constructed by the text - i.e., what account of "reality" is provided by the text, and how does the construct this reality via its wordings, grammatical/syntactic devices (e.g., nominalisation), and so on. Various techniques may be employed to locate gaps and silences, inclusions and exclusions - who is "in" the text and who is "written out of it"? What and whose interests are at stake in the worlds created and reading positions invited, and so on. Any number of such techniques and devices are detailed in the literature (see, for example, Buckingham and Sefton-Green 1994; Comber and Kamler 1997; Fairclough 1989; Gee 1996; Gilbert 1989; Janks 1993a and b; Luke and Kale 1991; Mellor, B. and Patterson, A. 1991; Searle 1998; Wallace 1992).

The crucial point is, however, that these techniques presuppose theoretical positions, experiences, availability of criteria and values, some kind of moral point of view and commitment, and the like for their operation to amount to critical literacy in any serious sense of the ideal. Critical literacy is not something that occupies a timetable slot or that can be turned on and off to demand. It is a discursive commitment, a form of life, a way of being in the world. Hence, practices of critical literacy are a call to theorizing the world and language/texts/inscription/literacy in relation to the world: to developing an understanding of the social world as an "uneven playing field", and becoming aware of how language and language users are implicated in creating, maintaining or challenging this playing field and the representations that support it. The field, of course, is not static, but always in the process of being made and remade, albeit in ways that reflect broad trends and patterns over long historical periods.

Teaching and learning techniques and processes of critical language analysis must, then, proceed in tandem with developing appropriate forms of theoretical and conceptual awareness. To put it crudely, if learning and using "techniques" to locate "sexist language" in a text are not accompanied by theoretical exploration of the operation and effects of patriarchy and of how work at the level of language mediates material effects that are patterned and structural, critical literacy pedagogy is stillborn - analogous to doing noun counts and similar exercises. Similarly, if critique of advertisements does not proceed in tandem with theorizing consumerism, the fetishizing work of signs and images, and analysis of who benefits and how from the commodification of human values, critical literacy pedagogy is likewise stillborn.

Lessons from a digital text

Allucquère Rosanne Stone provides a fascinating perspective on these matters in *The War of Desire and Technology at the Close of the Mechanical Age* (1996). Indeed, her ironically humorous-poignant account of social relations, values, processes, and language lying (invisibly, other than to a few immediate observers) behind the development of a computer game encapsulates in a concrete way much of what we have said here, and shows very clearly what the stakes are.

Stone describes a digital sweatshop (Wellspring Systems) where today's equivalents of the 1980s programmers "who were pulling down sixty to eighty thousand dollars a year on royalties" are "kids [who] work on fixed salaries, not royalties", and "who live in fear of the hundreds of technokids waiting outside for one of the elect to stumble" (Stone 1996: 158). The company owners, meanwhile, are multimillionaires who "grimly enforce the pressure cooker atmosphere of competition" (ibid.).

It gets worse. Stone recounts one "move" in what might be called a gender-techno war. The players are a woman from the marketing division, and Memphis Smith, a programmer supervising the development of a new game called Battle Commander, "which promises to be the biggest seller in [the company's] history" (ibid.: 159).

When the pre-release version of Battle Commander was demonstrated, it opened with a screen showing "a naked young women covered by a thin sheet, lying on an army cot", and who sat up looking "seductively at the player" when the cursor passed over her. A day or so later the woman from marketing approached Smith and asked how she might be able to influence the way women were depicted in the game.

Smith looked her over as if she were a putrefying fish. He inflated his chest just a bit - something of an accomplishment, considering his already cocky attitude. Well, little lady, he said in an exaggerated drawl, "tell you what, why don't you just take it up with the artist, or better yet - he leaned in at her, pushing his face close to hers, his voice dripping sarcasm - "Why don't you just call my boss and get me fired?"

There was a pause. "I see," she said, and walked away.

"The way women are depicted in the game," Smith chuckled. "You can always tell the ones that never get any." (ibid: 160)

Some weeks later Wellspring Systems was phoned by the president of another company which had just acquired a controlling share of Wellspring stock. The caller demanded that the opening screen/scene be changed. When informed of the demand, Smith exploded, accusing "them damn frog women" of trying to polarize the production team... ("Frog women" referred to women not meeting Smith's criteria for "attractiveness" - which apparently extended to "any woman with the temerity to remark on the quality of his games" (ibid.: 161). Stone narrates what ensued as follows:

[Smith] "Them damn frog women don't like what we're doing. Stirring up trouble like that. Where do they come off saying Battle Commander is sexist"? He pounded his fist against the door. "There us absolutely no sexism in this game".

...

Roberts [a colleague] calmed him down. They decided on what they believed was a compromise. The naked woman stayed. A second cot appeared in the screen, on which lay a naked man, also covered with a sheet. He did not sit up when censored. (ibid: 161)

Clearly, the stakes for critical literacy under postmodern conditions of cultural production and consumption are high.

Cases from the field

We want to pick up elements of the framework outlined above and relate them to some examples we have encountered around Brisbane of young people exploring new technological literacies in varied settings. None involved an exercise in critical literacy as such, but they nonetheless help illuminate ways in which the critical dimension of literacy might fruitfully be explored. The examples involve school students and young adults who worked within a community-based space called GRUNT during 1995-97.

(a) GRUNT and The Valley

i. The Valley

Fortitude Valley - "The Valley" - is located in Brisbane's inner city. It is a well known part of town which, in the past, has been associated with marginal life and activities. On one hand, it is the location of Brisbane's Chinatown, a bustling and thriving center of restaurants and businesses serving the long established Chinese community. More recently, other Asian ethnic groups have also established a cultural presence there, and different Asian communities find in the Valley a zone of ethnic familiarity and comfort. On the other hand, it has also for decades been a magnet for displaced, homeless, drifting folk, many of whom have addictions or histories of substance abuse. In addition, the Valley was formerly a well recognized site of vice: prostitution and various forms of racketeering. In the late 1980s, the Criminal Justice Commission inquiry into corruption at high levels resulted in some of the Valley's best known personalities being convicted and imprisoned.

These days, however, the heart of the Valley has undergone a dramatic "facelift". The mall has been upgraded, new shopping centers established, and existing businesses revitalized. The mall is now home to many outdoor cafés, sidewalk bars, tourist-related businesses, and trendy nightclubs. This caters in part to a new clientele of tourists, as well as to more affluent social groups who are wanting something "a little exotic" and "on the edge". At the same time, the Valley retains its traditional gritty base. Street kids, aged alcoholics, young unemployed men hanging out in video game parlors, bag ladies, lingering Mafia-like groups, and the like maintain a visible presence, albeit a lower profile presence than previously.

One consequence of these recent changes has been the "rewriting" and "sanitizing" of the Valley for sale as a tourist destination and yuppie playground. As a result, the long-

standing marginal youth users of the Valley - who are among the traditional "owners" of this space and its activities - have been written out of the new official representations of the Valley and pushed still further to the margins.

GRUNT began in 1992 as an idea about creating a safe and welcoming space for young people in the Valley area. The driving forces behind GRUNT were two performance artists, Michael and Ludmila Doneman (<<http://mwk.thehub.com.au>>), committed to supporting youth arts, cultural development, and training. At the time of the Virtual Valley projects described below, GRUNT was both a physical production and meeting space and an agenda for cultural productions of meanings and identities. In part, GRUNT aimed to equip youth with skills and strategies to earn a living. GRUNT was also, however, heavily involved in offering activities which would promote a sense of self-identity and interconnectedness with other identities and contexts in a world where these young people seemed increasingly to have no place.

As a physical space, GRUNT occupied 100 square metres of warehouse space on the first floor of a building in the centre of the Valley. It was divided into three spaces. One area was used mainly for regular art exhibitions and performances. A second was a general purpose meeting, "hanging out", and administrative space, furnished with deep comfortable chairs and decorated with paintings and collages, plus the occasional prop from previous performances. The third was GRUNT's main "digital production area". Making the space as "un-school-like" as possible was an explicit operating principle. Multimedia equipment available to GRUNT users included colour flatbed scanners, up-to-date sound, text and image authoring software, Internet browser software and hypertext mark-up language (HTML) editors, data panels and projectors, digital cameras, conventional cameras, video cameras, and the like. The emphasis was on support for enterprise and self sufficiency. Unlike drop-in centres and similar facilities, GRUNT, with its online telecentre and multimedia laboratory, worked to provide inner city youth with "training in vocational skills, in the mastery of the new information technology and in planning, management and life skills" (Stevenson 1995: 4).

GRUNT's cultural production agenda included a range of web-based projects as well as visits to marginal communities - especially traditional indigenous communities in central Australia - and subsequent performance and artistic productions based on what participants have learned through these visits about others and themselves. Web-based projects covered diverse interests and identities. Prior to forming GRUNT, the Donemans had established Contact Youth Theatre to undertake a series of indigenous and cross-cultural projects. Initially, these took the form of touring performances and created the need for a physical base, which became GRUNT. At the same time, similar groups were operating in other parts of Australia. It was decided to make known and connect the work of these groups by creating a common web space: Black Voices. This site is accessed from GRUNT's main web page (unfortunately, we are not longer able to point you to the GRUNT website - a lack of funding for the project has brought about its demise). The Black Voices site broadcasts information about these theatre groups and their performance-based projects. For example, the Contact Youth Theatre production, "Famaleez" (a phonetic rendition of "families"), was "based on the extremely sensitive

issue of alcohol and substance abuse in indigenous communities". The project focus was on "the traditional aboriginal construction of 'family' and the way it was used to give people structure and meaning", and built on the historical reality of the invasion of Australia by Europeans which had resulted in "a whole range of social dislocations and problems through the destruction of the extended family structures of many groups" (originally written at <<http://www.odyssey.com.au/ps/GRUV/contact/confama.htm>>). A second example is "Digitarts" (<<http://digitarts.va.com.au>>), an on-line "new wave" feminist zine written by young women for young women, exploring alternative perspectives on fashion, and expressing different conceptions of female identity through poems, narratives and digital images. Hotlinks to similar web sites on the Internet also defining each writer's self, and her self as connected with other selves.

The Virtual Valley Projects: Virtual Valley I and Virtual Valley II.

Between 1995 and 1997, GRUNT conducted two projects, each with an "on-line" (or "virtual") component, based on the Valley. These projects were Virtual Valley I and II. They focused on the way in which young people, who have strong affinities with the Valley and whose identities were bound up with it, were now being pushed out of its redefinition and "development".

a) Virtual Valley I ran in 1995. It aimed to produce "an alternative user's guide" to the Valley, which would provide different readings and writings of the Valley from those in official municipal promotions and tourist brochures.

As an oppositional cultural response, Virtual Valley I presented work by nine young people who used the Valley in a daily basis for "work and recreational purposes". These youth "hold strong opinions about the valley's role" in the life of Brisbane, which was being promoted by the State government as "Australia's most liveable city". Participants' work was presented in two formats: a web site, and a booklet to help guide visitors "through a number of interesting sites using maps and postcard images" (which could be pulled out and used as real postcards) based on these young people's identities, values, world views, experiences, and ways of locating themselves personally and collectively in time and space within the Valley (original text was from <<http://www.odyssey.com.au/ps/GRUV/vvalley/welcome.html>>). The focus was on encouraging young people "to map the Valley area in ways that are culturally relevant to themselves and their peers". Places of interest presented in the Virtual Valley web site included the location of a large clock (used by youth who do not have or wear watches to check the time), and favourite places for dancing, eating, getting coffee, finding bargains, and meeting friends. These were incorporated into web pages built around an on-line street map which contrasted graphically with tourist maps, such as an official >heritage trail= which mapped points of interest from the standpoint of colonialist history. The hard copy booklet provided a postcard picture collage of images - including some from the web site - which ranged from snapshots of a gutter and a tidy line of garbage bins, to a crowded Saturday market scene in the Mall.

b) Virtual Valley II involved students from two elementary schools near the Valley. One of these was an Aboriginal (Murri) and Torres Strait Islander independent community school, which aimed to provide a pedagogical balance between Aboriginal funds of knowledge and culture and those of mainstream white Australians. Students would spend half a day each week at GRUNT exploring aspects of identity using conventional artistic means of painting, drawing, and collage, as well as learning technical aspects of web page construction - including basic HTML and web page design principles, using digital cameras, manipulating digital images and anchoring them to web pages, and using flatbed scanners. Students gathered material for their web pages on walks through the Valley, using digital and disposable cameras, sketch books and notepads. They began putting together their individual web pages by creating large-scale, annotated collages of aspects of the Valley that were significant to them. These collages comprised photocopies of digital and camera images they had taken of themselves, their friends, family members, and the Valley area, plus drawings and found objects (e.g., food labels, ticket stubs, bingo cards, etc.). They were then pared back to key images and passages of text as each student prepared a flowchart depicting the layout and content their web page. During the last month of the project these flowcharts were used to guide the design and construction of web pages.

The result is a series of compelling and evocative readings and writings of everyday cultural (re)productions of the Valley seen through the eyes of these Murri children. The web pages combine photographic images of themselves in relation to the Valley=s topography and aspects that serve as icons or tropes for the multicultural life of the Valley. For example, one image shows a Murri student - identified as the writer=s cousin - sitting in the lap of a large statue of a Chinese doll in the heart of Chinatown. Others capture distinctive Chinese architectural shapes in the form of pagodas and symbolic gates, or shop windows displaying the headless bodies of plucked ducks ready for cooking. These pictures graphically portray the enacted identity of these Aboriginal young people "rubbing up against" key elements of Asian ethnic identities. Further images capture elements more directly involved in their own identities, such as photographs of Aboriginal mosaic designs set in the sidewalks, and others bring kinship together with vital aspects of popular youth culture and taste, such as the photograph of a Murri student drinking a McDonald's milkshake purchased by an aunty he met on his "field trip". Additional images of popular culture abound: such as pictures showing students lined up at a McDonald's counter, and photographs taken while playing video games at Time Zone and Universal Fun City. All of these photographs are accompanied by vivid texts. For example,

When I walk past in the morning the ice-cream lady is just sitting there.

In the middle of the day she yawns.

In the afternoon she eats the ice-cream she's supposed to sell.

In the evenings she goes home with no profit.

Justin's page is typical. His virtual tour of the Valley begins with a short poetic description of images and activities he sees around him.

People allsorts

Ice-cream parlour allkinds

Timezone fun

Dragons

Temples colourful

China Town lots of people

Justin's text is printed in large multi-coloured fonts (Courier and Times New Roman). Capital letters and italicised words, plus two photographic images, add further details to his stripped-down text. The first image captures the cultural diversity of the people in the Valley. The second underscores fun experiences at Time Zone by showing a video game in action. Following this description of his response to the Valley, Justin shifts to a recount genre and recalls the highlights of a particular stroll through the Valley with his class and activities at GRUNT, which included a role play about issues facing Aboriginal people in the Valley.

susan pretended to be opal

winney [Oprah Winfrey] and we was the audience

one group was police the others

was murries and shop owners after all

that we did some drawings

then we had lunch I had two banans

and three sandwhiches

I also had a drink of coke cola
 there was plenty for us to have
 seconds. My friend Louis ate lots of
 cakes and so he had an belly
 ache. After that we went for a walk
 in the valley we saw dead ducks
 with their heads still attached.

Beyond Virtual Valley I and II:

Imagining a critical literacy pedagogy

The Virtual Valley projects were not conceived as any kind of systematic critical literacy project. They were about making space for marginal "voices" and validating identities that are typically marginalised within the normal routines and values of dominant groups in daily life. By the same token, the projects definitely stimulated the beginnings of critical engagement with dominant/high status representations of reality. With texts representing dominant accounts of Valley reality already in place, and with Murri youth having produced their own representations of existential situations steeped in their lived realities, it would be possible to use the Web page and other cultural artefacts produced in the Virtual Valley pedagogy as resources for problem-posing education - and to introduce dominant representations as problematic texts.

From this point we can begin to envisage possibilities for a critical literacy pedagogy built around the use of new technologies. In the case of the Murri School students this work could proceed in various directions.

1. The text of Justin's poem could be taken as codifying problems concerning constructions of school-based literacy in relation to wider cultural practices of meaning-making. If we look at Justin's story-poem in terms of "official" constructions of school literacy it becomes problematic. In Queensland state, and in Australia more generally, there is a strong move to establish student profiles and benchmarks for English language literacy. Teachers are required to assess students, report their performances against the benchmarks, and to identify "at risk" students and enrol them in packaged remedial literacy programs. The benchmarks establish narrow "technicist" indicators for literacy, and define literacy in relation to meeting standards of technical accuracy (spelling, grammar, etc.). Justin's text would almost certainly fail against the national benchmarks for his grade level. It could be used as a basis for identifying and relating the operational,

cultural, and critical dimensions of literacy and the relationships between the. To this extent it would provide a basis for developing a critical perspective on literacy per se, for example by engaging the kinds of cases provided in collections like Prinsloo and Breiers' (1996) *Social Uses of Literacy*.

Official constructions of literacy framed in terms of such benchmarks "domesticate" literacy, reducing it to matters of technical accuracy, and to the ability to encode and decode text. They negate constructions of literacy in terms of relating word to world, of learning to read both word and world, and so on. This is not to say that matters of technical accuracy are not important, because to a considerable extent they are. It is, however, to say that Justin's text - like others at the Virtual Valley web site - is a powerful expression of meaning; a powerful statement of cultural understanding and of the relationship between language and identity/ies. It is also to say that this power is very often absent in technically accurate and "proficient" texts. Texts like Justin's, then, can provide a window on the cultural dimension of literacy, allowing learners to explore meaning making among different social groups.

2. A critical literacy pedagogy could use work like Justin's to investigate the values and norms underlying "benchmark-based" accounts and indicators of literacy, and contrast these with the values and norms underlying other social practices of literacy - including some of those which may be very powerful, but where the power has little to do with technical accuracy and more to do with breaking rules and conventions (such as in advertising, various popular cultural forms - e.g., gangsta rap - and so on).

3. The students' artefacts could be used to problematise other aspects of school knowledge and school-based pedagogy. For example, the Virtual Valley web pages graphically contest the "banking" model of classroom learning (Freire 1972), and the construction of learning as an interaction between teacher and learner that occurs within classrooms. The presence of kin - especially aunties - in so many of the students' photographs and drawings stimulate wider conceptions of learning resources and learning guides than teachers and conventional classroom materials alone. They remind us that the gates and walls between the traditional classroom/school and the community are artificial barriers that serve to enclose official learning within particular sites and under the subjection of particular regimes of truth - resulting in learning grounded in school discourses which generally have very little to do with "mature" (or "insider") versions of social practices in the world beyond school; inviting the question of what school learning is for (Gee, Hull and Lankshear 1996: 1-23; Knobel 1999). They remind us also that subject boundaries are themselves in many ways artificial demarcations which can impede our efforts to know the world in ways which relate "parts" to "wholes".

4. Components of the students' web pages have the potential to support problem-posing pedagogy that opens up crucial epistemological themes related to questions of power and advantage in ways learners and teacher-facilitators together can relate to their own circumstances as members of socially marginalised groups. Such codes could stimulate questions about how conventional school-based learning opportunities differ from learning opportunities available in GRUNT space. They could also provide opportunities

for asking whether it would be effective - or possible - to try and reinvent their school learning in ways that are more like learning opportunities at GRUNT within the Virtual Valley project, and how this might be done.

5. The students' cultural investments themselves contain problematic elements which could be codified for closer investigation. Time Zone is commodified entertainment, part of a commercialised youth culture, which costs regular players - usually young people - large amounts of money each year. At the same time, the video games at Time Zone and similar parlours contain values and storylines which are very often highly sexist, racist and violent. They often mystify power - reducing power to considerations of physical strength - and encourage vicarious living. In many ways these genres operate on the "logic" described by Freire as "taking the oppressor within": individuals who experience disempowerment in many areas of their lives are encouraged by video game playing to enter virtual worlds where they experience illusions of power. This process diverts attention and energy away from reflection-action to address issues of social power in the real world. It is a form of "bread and circus" diversion. It is also an invitation into conceptions of power as individualised property - the winners and heroes in the games are very often individuals. In addition, of course, the kinds of considerations raised by Stone, and addressed above, come into play here.

Part of what is attractive to youth who "hang out" at parlours like Time Zone is the opportunity to meet as a group, to belong to a community of practice where they achieve success and status. Student produced codifications of cultural practices in spaces like Time Zone could be used as a stimulus to explore issues of community as well as issues of power, and to decode the ideologies of the games and relate the various elements of these ideologies to larger social processes - particularly, processes which create and sustain hierarchies of dominant and marginal social groupings. Indeed, for many of these young people new electronic technologies memberships in quite different communities of practice which are grounded in quite different purposes and possibilities. Within Time Zone, the technologies provide a focus for alliances and practices associated with youth culture, street culture, hanging out, and being entertained. In the postmodern educational setting of GRUNT-space, the technologies mediate opportunities to acquire new technological skills and understandings within contexts of exploring cultural identity and creating spaces for expressing this identity to and among audiences who will accept and relate to it on its own terms.

Conclusion

Of all the elements which shape and shape postmodern times, few are more palpable than the new electronic technologies. Yet, as critically informed commentators increasingly observe, new technologies can be employed for very different purposes. Freire, of course, made exactly the same observation about education - which can be seen as an age-old, albeit evolving, technology. Like education, new information and communication technologies can be turned to purposes of oppression or liberation: both in their own right and in their more specific roles as educational or learning technologies. These who are

interested in the theory and practice of liberatory education in current times cannot afford to ignore this new dimension of educational mediation and engagement.

References

Bigum, C. and Lankshear, C. (1997). The literacy-technology interface in workplace and adult learning contexts. Invited keynote address to the NCELTR International Seminar, Sydney, October.

Buckingham, D. and Sefton-Green, J. (1994). *Cultural studies Goes to School: Reading and Teaching Popular Media*. London: Taylor & Francis.

Castells, M. (1996). *The Rise of the Network Society*. Oxford: Blackwell.

Comber, B. and Kamler, B. (1997). Critical literacies: politicising the language classroom. *Interpretations*. 30 (1).

DEQ (Department of Education, Queensland) (1995). *English in Years 1 to 10 Queensland Syllabus Materials: English Syllabus for Years 1 to 10*. Brisbane: Department of Education, Queensland.

Fairclough, N. (1989). *Language and Power*. Harlow: Longman.

Franklin, U. (1990). *The Real World of Technology*. Montreal: CBC Enterprises.

Freire, P. (1972). *Pedagogy of the Oppressed*. Harmondsworth: Penguin.

Gee, J. (1991). What is literacy? In C. Mitchell & K. Weiler (Eds.), *Rewriting Literacy: Culture and the Discourse of the Other*. New York: Bergin & Garvey.

Gee, J. (1993). Literacies: tuning into forms of life. *Education Australia*. 19.

Gee, J. (1996). *Social Linguistics and Literacies: Ideology in Discourses*. 2nd ed. London: Taylor & Francis.

Gee, J., Hull, G. and Lankshear, C. (1996). *The New Work Order: Behind the Language of the New Capitalism*. Sydney and Boulder, CO.: Allen & Unwin and Westview Press.

Gilbert, P. (1989). *Writing, Schooling and Deconstruction: From Voice to Text in the Classroom*. London: Routledge.

Green, B. (1988). Subject-specific literacy and school learning: A focus on writing. *Australian Journal of Education*. 32 (2).

Green, B. (1997a). Literacy, information and the learning society. Keynote address at the Joint Conference of the Australian Association for the Teaching of English, the Australian Literacy Educators' Association, and the Australian School Library Association. Darwin: Darwin High School, Northern Territory, Australia, 8-11 July.

Green, B. (1997b). Literacies and school learning in new times. Keynote address at the "Literacies in Practice: Progress and Possibilities" Conference. Adelaide: South Australian Department of Education and Children's Services and the Catholic Education Office, 1 May.

Janks, H. (1993a). Language and Position. Johannesburg and Randburg: Witswaterland University Press and Hodder & Stoughton Educational.

Janks, H. (1993b). Language, Identity and Power. Johannesburg and Randburg: Witswaterland University Press and Hodder & Stoughton Educational.

Kale, J. and Luke, A. (1991). Doing things with words: early language socialisation. In E. Furniss and P. Green (Eds.), *The Literacy Agenda: Issues for the Nineties*. South Yarra: Eleanor Curtain Publishing.

Knobel, M. (1999). *Everyday Literacies: Students, Discourse and Social Practice*. New York: Peter Lang Publishing.

Lankshear, C. (1991). Getting it right is hard: redressing the politics of literacy in the 1990s, in P. Cormack(Ed.), *Selected Papers from 16th Australian Reading Association National Conference*. Adelaide: ARA, pp. 209-228.

Lankshear, C., Bigum, C. et al (1997). *Digital Rhetorics: Literacies and Technologies in Education - Current Practices and Future Directions*. 3 vols. Project Report. Children's Literacy National Projects. Brisbane: QUT/DEETYA.

Lemke, J. (1984). Action, context and meaning. In *Education and Semiotics* (Toronto Semiotic Circle Monograph). Toronto: University of Toronto.

Luke, A. (1992). Conference materials. Working Conference on Critical Literacy. Brisbane: Griffith University, July.

Mellor, B. and Patterson, A. (1991). Reading character: Reading gender. *English in Australia*. no. 95.

Muspratt, A., Luke, A. and freebody, P. (Eds.), (1997). *Constructing Critical Literacies*. Cresskill, NJ & Sydney: Hampton Press and Allen & Unwin.

Postman, N. (1985). *Amusing Ourselves To Death: Public Discourse In The Age Of Show Business*. New York: Penguin.

Prinsloo, M. and Breier, M. (Eds.), (1996). *The Social Uses Of Literacy: Theory And Practice In Contemporary South Africa*. Amsterdam: John Benjamins.

Searle, C. (1998). *None but Our Words*. Buckingham & Philadelphia: Open University Press.

Stephenson, P. (1995). *Making space: for those who invent tomorrow, a report on the feasibility of a multi-purpose youth facility for Brisbane*. Brisbane: Queensland Department of Tourism, Sport & Racing and Queensland University of Technology Academy of the Arts.

Stone, A. (1996). *The War of Desire and Technology at the Close of the Mechanical Age*. Cambridge: MIT Press.

Wallace, C. (1992). *Reading*. Oxford: Oxford University Press.

Winner, L. (1989). *Mythinformation in the high-tech era*. In T. Forester (Ed.), *Computers in the Human Context*. Oxford: Blackwell.