This paper examines some recent road safety education initiatives for senior high school students in Queensland. The first has been developed and trialled by Queensland Transport to promote safer driving by young drivers. Program outlines and a trial based on these program outlines are analysed. The second is under development by a regional Catholic Education Office to assist Indigenous boarding students to obtain their learner licence as part of their senior schooling before returning to their home communities. Program documentation is analysed. The third was a one-off program implemented in a state high school in Townsville in 2003; it is analysed on the basis of observations of the program, student work and interviews conducted with students involved in the program. These initiatives are critically compared with current educational research on quality teaching. The analysis highlights differences, from a negatively focused information based approach, through a more practical-outcome focus, to an approach that engages students in investigation, significant ‘real life’ problem solving and advocacy. It argues that the analysis of these programs in light of theories of good pedagogy offers pointers for the future development of effective road safety education programs.

Introduction

In their final years of secondary schooling most students become eligible to obtain a driver licence. As young, inexperienced drivers, they are disproportionately over-represented in traffic crashes (Harré, Brandt & Dawe, 2001; Legislative Assembly of Queensland. Parliamentary Travelsafe Committee, 2003; Parliament of NSW. Staysafe Committee, 2004; Triggs & Smith, 1996; Williams, 2003). Concern about the levels of risk associated with young drivers has prompted a number of schools and other agencies to develop road safety education programs directed at students in years 11 and 12. The literature on road safety education, however, indicates that many road safety education programs have relatively little effect on the road use behaviour of those who participate in them. This paper analyses three road safety education programs recently offered, or currently under development, in light of the current understandings of good pedagogy and how pedagogy might work to shape learners in ways that might be expected to have durable effects on their behaviour, to identify some important considerations for developing future road safety educational programs.

Road safety education: the literature

There is a substantial body of literature that examines road safety education in schools (e.g., Azeredo & Stephens-Stidham, 2003; Catchpole & DiPietro, 2003; Ferguson, Schonfield, Sheehan & Siskind, 2001; Global Road Safety Education, 2001; Maggs & Brown, 1986; Marsh & Hyde, 1990; Rowland, Wright, Harper & Gray, 2005; Schrodter, 2003; Senserrick, 2007; Senserrick & Haworth, 2005; Sheehan, Schonfeld.
Ballard, Schofield, Najman & Siskind, 1996; Thomson, Tolmie, Foot & McLaren, 1996; Walker, 1995), although relatively few studies deal with programs specifically for senior secondary students1 (examples include Sheehan, Ballard, Schofield, Najman & Siskind, 1996, Walker, 1995, and possibly Rowland, Wright, Harper and Gray 2005, although the intended age group is not specified). This literature is paralleled and supported by program materials themselves (e.g., Department for Transport, n.d.; VicRoads, 2006) and by studies and documentation of programs delivered out of schools for a range of audiences (e.g., Brennan, 2001; Christie, Harrison & Johnston, 2004). These accounts and even cursory analysis of the materials indicate that they vary widely in scope from general coverage of a wide range of road safety to narrowly focused but more in-depth treatments of specific issues, but that across these differences, they tend to focus either on transmission of information, or development of practical road use skills, or a combination of both, although a small number focus on developing strategies for shaping behaviour (e.g., Ferguson, Schonfield, Sheehan & Siskind, 2001). For young adults, information-oriented programs address social contexts of road use (especially driving), factors affecting cognitive competence (such as use of drugs and alcohol) or application of skill (such as inexperience), and consequences of crashing.

The implicit aim of providing such information appears to be to provide a basis for developing cognitive capacity for making rational, informed and competent decisions, and a combination of knowledge and attitude to lead them towards making such decisions. The strategies employed to encourage young people to make use of their newly acquired skills or knowledge are, almost exclusively, a combination of fear of consequences of illegal and/or dangerous driving, and moral exhortations based on a presumed desire to maintain a positive sense of self and an appreciation of consequences of crashing not only for themselves but for others. Overwhelmingly, in so far as such programs directly address issues of regulation of road use behaviour, they do so on the basis of theories drawn from the broad field of cognitive psychology, notably the theory of planned behaviour (Armitage & Conner, 2001; Parker, Stradling & Manstead, 1996).

Most of the programs documented in this literature take the form of ‘add on’ programs, outside both the core curriculum and the assessment structure for senior schooling although there are some exceptions (Department for Transport, n.d.); many are relatively short; and many are delivered by ‘experts’ or practitioners in fields other than education.

Studies evaluating outcomes of road safety education indicate that neither skills based nor classroom programs based on knowledge and cognitive capacity have much demonstrable impact on everyday road use behaviour (e.g., Azeredo & Stephens-Stidham, 2003; Christie, 2001; Dragutinovic & Twisk, 2006; Duperrex, Bunn & Roberts, 2002; Ferguson, Schonfield, Sheehan & Siskind, 2001; Sheehan, Schonfield & Davey, 1995; Sheehan, Schonfield, Ballard, Schofield, Najman & Siskind, 1996; c.f., Legislative Assembly of Queensland, Parliamentary Travelsafe Committee, 2003;

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1 Searches of online databases (A+Education, ERIC, Proquest5000, Infotrac Expanded Academic, Google, Google Scholar), using combinations of the keywords (traffic, road, safety, driver, licence/license), (teen, adolescent, student) produce very large numbers of refereed journal articles, a high proportion of them dealing with non-educational interventions, such as graduated licensing legislation. The addition of keywords (education, school, curriculum, program, teaching), dramatically reduces the number of articles.

Vick and Navin, Road safety education in schools: a critical examination of three initiatives AARE VIC07350  2
Vernick et al., 1999; Zeedyck et al., 2001). However, Leadbeatt (1997) demonstrated that the program she evaluated, in which teachers used a variety of active learning strategies with problem solving components did result in improved road use behaviour. Analyses of broadly educational social marketing campaigns indicate relatively high long term success for campaigns sustained and reinforced over a lengthy period (c.f., Lamb et al., 2006). Similarly, Hall, Cross, Stephenson and Howat (2007) demonstrated that there could be significant improvements in target behaviour from a sustained, focused whole-school campaign. Importantly (in light of the number of social marketing and senior secondary programs that use such an approach), a number of studies have shown that fear-based messages have little impact on their audiences (e.g., Aldoory & Bonzo, 2005; Ben-Ari, Florian, & Mikulincer, 2000; Hastings, Stead & Webb, 2004; Tay & Watson, 2002).

There are major critical gaps in the literatures informing road safety education. The road safety education literature is marked by a lack of critical or theoretical attention to pedagogy. Relatedly, there is a lack of explicit, critical attention to the question of how learning might connect to behaviour. It is, therefore, lacking in crucial bodies of research-based theory within the field of education that offer crucial insights into what constitutes good educational practice. And both the road safety research literature in general and the road safety education literature are characterised by an almost complete lack of any sociological or qualitative theory and research that might explore the road use behaviour at an experiential level or the connections between learning, subject formation, desire and behaviour (Vick, 2003; 2006).

**Powerful pedagogies**

There are at least two bodies of research and theorising which point to approaches to teaching which do have potential for making stronger connections between learning and behaviour: poststructuralist research and theory regarding governmentality and subjectification, and pedagogical theory associated with labels such as Quality Teaching, Productive Pedagogies and Powerful Pedagogy. While poststructuralism and quality teaching have different intellectual affiliations and lines of descent, we think they address different aspects of the issue we are considering, and that they can be used to complement each other in this context, despite what might appear at first sight to be their theoretically incommensurability.

‘Governmentality’ refers to a mode or strategy of government that operates through subjects’ self-regulation (Dean, 1999; Foucault, 1991; Gordon, 1991). It is theorised as an effect, not of consciousness, but of the acquisition and habituation of a range of specific practices – what Foucaultian theory calls ‘technologies of the self’ (Foucault, 1988) – for inducing subjects ‘to question their own conduct, to watch over and give shape to it, and to shape themselves as ethical subjects’ (Foucault, 1991, p. 12) in what Foucault calls the ‘conduct of conduct’ (Foucault, 1991). Subjectification refers to the range of social practices, including the subject’s work upon itself, through which subjects construct a particular sense of self, constituted on ‘the territory traced out by the multitude of schemes, dreams, calculations and strategies’ (Foucault, 1991, p. 6; c.f., Rose, 1992), constituting desires which shape behaviour with ‘emotional, physical, aesthetic and political force’ (Mansfield, 2000, p. 171). Subjectivity, the outcome of these processes is inseparable from the discourses that offer particular possibilities (‘subject positions’) for understanding the self and identifying with
different subject positions and what they represent; these are seen as multiplicitous, resulting in a subject that is always multiplicitous and flexible, and thus open to reconstitution around different desires (Davies, 1994). Crucially, governmentality involves the alignment of subjects’ desires and conduct with the goals and objectives of government, through the identification of self as moral, rational, competent, skilful and knowledgeable. Cruickshank (1996) shows how self esteem, for instance, is widely mobilised to engage subjects in a range of practices of self transformation, with consequences for their relations with and towards others, and their political obligation. Thus, she cites one Californian report as asserting that:

Government and experts cannot fix… problems for us. It is only when each of us recognises our individual personal and social responsibility to be part of the solution that we also realise higher self-esteem.


This process opens up spaces for pedagogical intervention through the teaching of a variety of practices for self reflection and the reconfiguration of the subject positions and associated desires offered by different discourses (Cruikshank, 1996, Davies, 1994), that might transform the domain and desirability of ‘risk’ into the domain and desirability of care for self and others (Lemke, 2002).

Poststructuralist theory offers a general framework for conceptualising how pedagogy might work to transform subjects by engaging them in work upon their selves. Current pedagogical theory offers major insights into the sorts of teaching and learning practices that might be required to engage in the work of cultivating the self that poststructuralism suggests might be required to connect road safety educational programs to safer road use. This pedagogical theory identifies three key elements required for teaching to produce these sorts of difference in and from student learning.

First, it is widely recognized that students become more engaged in their work when it is of relevance to them, and when they are encouraged and enabled to explore and construct connections between issues and subject matter directly under investigation to broader life contexts and fields of activity (Bigelow, 2006; Hayes, Mills, Christie & Lingard, 2006; Harris, 1999; Leat & Higgins, 2002; Lovat, 2005, 2007; Newman, Marks & Gamoran, 1996).

Second, current pedagogical theories stress the importance of intellectual depth. Depth is concerned with directing students away from superficial factual learning by encouraging analysis and evaluative skills. Such analysis and evaluation involves dealing with a wide range of facts and details on a topic, and a move from unreflective opinion as the basis for judgement towards a more critically distanced ‘objectivity’. Crucially, it involves a move from simplistic understandings of relations between different information and issues, to more complex understandings (White & Gunstone, 1992). Such complex understandings are gained, in part, by rigorous attention to critical questioning and reasoning of connections. They are enhanced by engaging in careful application of knowledge and understandings gained from formal study within the confines of the classroom to a variety of real life contexts, and are thus connected to the issue of relevance. Underlying these is the recognition that the most powerful student learning occurs when students are encouraged and enabled to work together to explore materials and build their own connections among facts and ideas, issues and situations by engaging in problem solving, in discussion and negotiation of ideas, and in reflection on their own values in relation to issues presented (Darling-Hammond, 2000; Hill &
Hill, 1990; Leat & Higgins, 2002, Lovat, 2005, 2007; Steinberg & Kincheloe, 1998; Webb & Farivar, 1994). Problem solving, here, must not be reduced to formulae, abstracted from real life contexts, but must entail investigation of ‘genuine’ problems that are complex, significant and authentic, and that have no ready made ‘solutions’. Engagement in exploring possible responses to such problems can be seen to position students/subjects as problem solvers – to offer to them an understanding of themselves as knowledgeable advocates for desirable outcomes and with an investment of self in the achievement of those outcomes – a pedagogical realisation of the theoretical strategies of governmentality and the work of self transformation, linked onwards to self regulation, as outlined above (Cruikshank, 1996; Davies, 1994; Dweck, 1999; Potter & Wetherell, 1987). Evaluations of a number of successful programs designed to enable individuals to change not only their intentions and attitudes but their concrete behaviour, strongly indicate that in areas such as road safety education it is not sufficient simply to inform understandings through the depth of intellectual engagement with knowledge. In addition, it is important to help develop concrete practical knowledge linked to pragmatic strategies through which students are enabled to put their imagined strategies into practice (e.g., Catchpole & DiPietro, 2003, Parker et al., 1996; Sheehan, Schonfield & Davey, 1995; Sheehan, Schonfeld, Ballard, Schofield, Najman & Siskind, 1996).

The third crucial dimension of pedagogy suggested by current theory is the cultivation of inter-relational capacity, reflection and self-reflection. Intellectual depth and the capacity to apply understandings to a wide range of contexts enables students to empathise with a range of others’ viewpoints, leading to a greater awareness of others and self. The development of such empathetic understanding includes three elements. First, it involves an interactive learning context (Smyth et al., 2000; Steinberg & Kincheloe, 1998; Webb & Farivar, 1994) in which relationship, negotiation and recognition of others’ views and of how students’ own views relate to those of others is required (Bingham & Sidorkin, 2004; Leat & Higgins, 2002, Lovat, 2005; 2007). Second, it involves positioning the student as a social agent, actively enlisted and involved in the promotion of social good (Schrodter, 2003, Davies, 1994, Potter & Wetherell, 1987). Third, it requires a consideration of values that utilises reflection on the students’ own values to develop a wider framework of social and ethical (‘moral’) understanding and commitment (Lovat, 2005; 2007). Such a positive approach to the engagement of students not only in learning and constructing knowledge, but in adopting an approach to their own behaviour and issues of the wider social good are thus recognised (consistently with the research cited above on fear based approaches) as more effective than approaches which emphasise the likelihood of negative outcomes for the individual.

The programs

The three programs considered here are different in both style and content, and in their level of development – a matter which has implications for the methodology for analysing them and for the nature of the claims that can be made about them from the analyses. The first has been developed and trialled by Queensland Transport to promote safer driving by young drivers. Here it is possible to conduct a detailed empirical analysis of content, materials, espoused strategies in the program documentation as well as actual pedagogical practice and student responses to the
program as delivered. The second is under development by a regional Catholic Education office to assist Indigenous boarding students to obtain their learner licence as part of their senior schooling, before returning to their home communities. Program documentation is analysed for what it reveals about both content and pedagogical strategies. Here, it is possible only to analyse planned content and espoused pedagogical strategies. The third was a one-off program implemented in a state high school in Townsville in 2003; it is analysed on the basis of observations of the program, student work and interviews conducted with students involved in the program. The differences in aims and content make it impossible to make (valid) comparisons in relation to the effectiveness of the pedagogy or content selection. Crucially, in relation to the aim of road safety education, it is impossible to assess any impact on actual road use behaviour. Even if such follow up research were attempted in the two cases where the program has actually been delivered, the numbers (very small in one case; relatively small in the other) would make longitudinal study of even medium term behavioural effects practically impossible to determine, even if theoretical/methodological issues around isolating the impact of the program from other factors could be resolved.

Despite the differences between the programs (in terms of content and pedagogy, as well as the nature of the evidence on which the programs can be assessed, we suggest that the analysis we conduct here offers important lessons for the ongoing development of these and other road safety education offerings. These lessons depend on the insights from comparing each of the programs, not with each other, but with the two bodies of research, outlined above, on existing road safety education and on powerful pedagogies.

Young driver awareness

The Youth Drive Alive program is one of two programs (Queensland Transport, 2006a; 2006b) aimed at senior secondary students developed by a regional road safety unit within the state Department of Transport (Queensland Transport, 2006a, p. 2). It was the basis for a trial program, Young Driver Awareness, offered in two state high schools in the north Queensland regional centre, Townsville-Thuringowa, as a collaborative initiative between several agencies (transport, health, police, emergency services, and led by transport) under the auspices of the cities’ Safe Communities program. As such, it was a specific response to young driver involvement in road trauma, and the lack of educational programs aimed at reducing that level of involvement. While there were some differences between the program as it is formally documented by Queensland Transport and as it was offered in the two schools, we draw on both in documenting the program. In addition to formal documentation, we are able to draw on observations of the program as it was delivered, on student

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2 We were employed by the program coordinator to evaluate the program; we had we had Education Queensland approval to conduct research in schools and approval from the JCU Ethic Committee (no. H2481) and permission from the program team and students who completed feedback sheets and interviews, to use the data for publication.

3 One of us was involved in developing and documenting the program; that person had Education Queensland approval to conduct research in schools and approval from the JCU Ethic Committee (no. H1567) and from students to use data collected, for publication.

4 Documentation of this program is more fully reported and analysed in our evaluation report; copies of which are available on request.
feedback from each session and on interviews with student and some formal post-
program evaluations of student learning following completion of the program.

The Youth Drive Alive program is documented as a ‘sixteen week intensive education
program for young drivers’ (2006a, p. 2); documentation comprises a trainer’s guide,
powerpoints and school materials. The Young Driver Awareness program offered in
the two Townsville-Thuringowa schools comprised six of these sessions:

1. Consequence of crashes (Police);
2. Alcohol/Drugs (Alcohol, Tobacco and Other Drugs unit within
Department of Health);
3. RAAP (Fire & Rescue Service);
4. Applying for Your Licence (Department of Transport licence testing unit);
5. Driving and Risks and strategies to manage risks (Police);
6. Never the Same Again (Ambulance).

Sessions omitted from the more comprehensive version address road rules, spinal
injury, road aggression and risk management, and buying a car.

While the program was supported by the participating schools, their role in the
delivery of the program was limited: staff organised arrival of students, settled them
and provided a behavioural management ‘presence’ but played no part in developing
or teaching the program or its component units.

Program content was largely organised around and focused on dangerous driving and
its negative consequences; there was relatively little about safe road use. Further, it
was overwhelmingly focused on information, with only secondary attention to
development of concrete behavioural knowledge. While some of this information had
clear and direct potential application to student behaviour (e.g., time for BAC to drop
to 0), or indirect application via an improved understanding of road safety issues (e.g.,
severity and extent of impact of crashes; role of personal responsibility), in many
cases the links remained implicit rather than explicit. A recurrent element across the
program was the reference to social marketing campaigns addressing key factors in
road safety/risk. Much of the information (e.g., crash statistics) was at best loosely
connected, and appears likely to remain only loosely connected, to students’ road use
behaviour. Potential connections depend on inculcating a sense of fear as a motivation
for safer behaviour, and of responsibility to others in recognition of the broad
ramification of serious crashes for a wide range of other people. These potential
connections are weakened by the facts that, while they indicate the disproportionate
involvement of young drivers in crashes they also indicate the statistical improbability
of any crash involvement, that actual involvement in crashes is not causally related to
probability but to driving behaviour, and that generalised fear as noted above, has
been shown to be a weak motivator of behaviour.

Weekly student feedback as well as interview data indicate that in fact the key learning
outcomes were information based. Some of this information was highly specific, and
included both information not explicitly connected to behaviour (such as crash statistics
as discussed above), and explicitly behavioural or applied information (e.g., ‘move to
the left when you hear an emergency vehicle is approaching’). Many students expressed
much of what they had learned in highly generalised form (e.g., ‘about the road rules’).
While statements in this form often indicate that the students were aware of the general
point or issue being discussed (i.e., ‘you need to know the road rules to get a licence and
drive safely’), they do not positively indicate anything resembling a deep or detailed understanding of the issues to which they might be connected.

However, a comparison of pre-program and post-program survey data demonstrated that, in fact, they had learned much of this information. Crucially, both the week by week data, and the pre- and post-program survey comparison indicated that students had become more aware of the significance of the ‘Fatal Four’ as contributors to road crashes and as road safety issues, although student feedback data, both following each session and as well as the written responses to hypothetical situations indicate that there may not be an important relation between awareness of these campaigns and recognition of the issues they address. Students overwhelmingly indicated that they thought this knowledge was relevant to them, would be useful to them, and would help them be better, safer road users in the future. Certainly, large numbers of students indicated that they had become far more aware of the importance of being responsible, of not ‘driving like an idiot’, and of ‘not being 6’ tall and bullet proof’ as a result of the program – attitudes that relate directly to the ‘loose nut at the wheel’ campaign, even though more the one-third of them remained unaware of that campaign. However, a minority of students who in some sessions stated that they wished there had been more ‘blood and gore’, also suggests an active disengagement with the intent of the sessions that disconnects the information from any application to themselves by treating it as a species of ‘horror show’ entertainment.

Presentation of the program was largely teacher centred, involving long periods of monologue or other forms of input by presenters with few supporting materials. Where supporting materials were used they were not integrated into what are understood with the teaching profession to be effective teaching strategies. Crucially, most sessions involved relatively little interaction or activity on the part of students, who thus remained largely passive for much of most sessions. Even watching a video or demonstration leaves students as recipients of information rather than as active processors of knowledge. In post-program interviews students repeatedly criticised the program for the over-reliance on presentation of material from ‘the front’, though they commented positively on the program overall: in both schools more than 90% of students commented in the weekly feedback questions that the program was interesting, relevant, clear, understandable, and useful for their future.

The potential impact of the program was also weakened by absences from sessions. For many students, the sessions clashed with work experience and other programs, so that weekly attendances at both schools averaged between 50% and 65% of the student cohort, despite as formal commitment by the schools to ensure participation by the whole Year 11 group.

Despite the criticisms implicit in our account of the program, it is clear that students found it relevant, interesting and worthwhile; it clearly demonstrated the first attribute of powerful pedagogy outlined above. In considering the social ramifications of crashes, the program also raised relational and ethical issues, while the treatment of drink-driving, and especially of obtaining a learner driver licence, the program clearly offered students important pragmatic behavioural strategies related to the information presented. However, there was no attention to manoeuvring students into genuine problem solving, systematic engagement of students with questions of values, active construction of complex understandings of issues around safe driving, or those
technologies of self through which they might reposition themselves and reconstitute their subjectivities and desires around safety, ethical practice or care for self or others. In these respects it clearly fell well short of many of the requirements of good pedagogy. These limitations can be seen to reflect the fact that it took the form of an add-on program; this meant that there was no teacher involvement to bring pedagogical expertise, there was no requirement to assess learning outcomes, and students were relatively readily withdrawn for other purposes. Further, this location outside the core program also makes it relatively easy for schools to decide to drop the program especially as it appeared educationally weak to a number of the teachers who observed the sessions.\(^5\)

*Drive4Life*

*Drive 4Life* is an initiative of the Townsville diocese Catholic Education Office (Catholic Education & Queensland Transport, 2007) aimed especially at Indigenous adolescents in senior high school. Issue here particularly pressing because of high proportion of unlicensed Indigenous drivers, range of barriers to licensing, and contribution of unlicensed driving to high levels of incarceration and road trauma (Berry, Nearmy & Harrison, 2007; CARRS-Q & Queensland Transport, 2003; Rumble & Fox, 2006; Styles & Edmonston, 2006). Thus the focus on enabling students to obtain their licence before leaving school can be seen not simply as an instrumental matter but as having significant road safety implications.

The program is still under development although it has been trialled in at least one school and is scheduled for systematic roll-out across other Catholic schools in the diocese and beyond, with expressions of interest from some state schools and Indigenous communities. It takes the form of a ‘structured community based learning program’, a form recognised by the Queensland Studies Authority (Queensland Studies Authority, 2006, 2007), and has been developed in consultation with the Queensland Studies Authority to ensure that it is congruent with their Guidelines for such programs, as those guidelines themselves are still under development.\(^6\) It comprises three levels of study, each of 55 hours duration, successful completion of which secures students 3 points towards their (20 point) Queensland Certificate of Education (Catholic Education & Queensland Transport, 2007, p. 7). As part of the program, students are required to obtain their learner driver licence.

While motivated by the need to address dangerous driving practices and consequent high levels of incarceration and road trauma, and therefore focusing on safe driving, the program embeds licensing and road safety in broader concerns for developing self esteem and the capacity for Indigenous young people to become more employable and to exercise leadership in building up their own communities. Thus, in addition to developing in students an understanding of the road rules, and of the broader issues of road safety, it seeks to develop an understanding of issues around identity (including those of establishing legal identity), a knowledge of how to identify appropriate government departments for a range of purposes, and competence in dealing with them and to prepare them for community engagement and choices for future work and study (Catholic Education & Queensland Transport, 2007, pp. 5-6). In this, the

\(^5\) The interview data on which this claim is based is summarised in the Report.

\(^6\) This claim cannot be documented; it reflects my ‘insider’ knowledge from involvement in presentations and discussions that have formed part of the process of developing *Drive4 Life* program.
program parallels the approach taken by TAFE programs for Aboriginal adults in South Australia, which embed driver licence and road safety education in a comprehensive suite of vocational and lifeskills education (Welgraven, 2007).

The first of the three stages focuses on developing ‘positive self identity’ and ‘an awareness of responsible citizenship’ which it positions in relation to safe driving, career and ‘future pathways planning’. This can be seen essentially as concentrating on issues of personal orientation to social relations and canvassing possible positive futures (Catholic Education & Queensland Transport, 2007, p. 7).

Stage 2 focuses especially on the particulars of road safety and on the development of the specific knowledge and skills required to obtain a learner licence. In the context in which it is developed (viz., the education of students drawn largely from remote Indigenous communities where Standard Australian English is often a second, third or fourth language or dialect) this entails far more than simply knowing the road rules. It requires students to address the challenges of formal, abstract ‘official’ use of Standard English, to develop a knowledge of means for establishing identity and of the range of situations where this is required, and to develop and use a working knowledge of procedures for obtaining services from government departments. Thus, students engage in face to face procedures for securing a learner licence through the Department of Transport, and online procedures for the Registry of Births Deaths and Marriages (Catholic Education & Queensland Transport, 2007, p. 7).

Stage three addresses issues of planning for a variety of aspects of their futures, including work and further study. Within this context students (may) undertake driving instruction to convert their Learner Licence into a Provisional Licence, a matter intimately connected to employment. They meet with representatives from more government departments, including Centrelink, Taxation, Health, Indigenous Business, and Fair Trading, and obtain documentation and/or services from some of them. These dealings relate to a wide range of contexts in which core documentation is required, and students are introduced to and encouraged to develop skills and specific practices for securing and safeguarding their documents. This development of skills and documentation is embedded in a mixture of concrete and aspirational planning for their futures and is calculated to cultivate the skills, desire and recognition of the possibility of a productive future (Catholic Education & Queensland Transport, 2007, p. 7).

As this account makes clear, the ‘informational’ content of the program is positioned within a broader conceptual framework. The program identifies four key organising concepts: identity; responsible citizenship; futures; and resources management. These concepts constitute a framework for addressing health and wellbeing, attitudes and perceptions, literacy and numeracy, understanding of consequences of actions, and community partnerships (Catholic Education & Queensland Transport, 2007, p. 8).

Assessment is fully integrated into the program, as is required for registration of the program by the Queensland Studies Authority as a contributor to the Queensland Certificate of Education (Queensland Studies Authority, 2006; 2007). Much of the assessment takes the form of demonstrated successful completion of particular tasks – the securing of a learner licence, for example, and the incorporation of various documents (birth certificate, certificate of Aboriginality or Torres Strait Islander identity,
immunization records, tax file number, resume and documentation of work experience) in a durable portfolio (Catholic Education & Queensland Transport, 2007, pp. 16-25). It should be noted that the Queensland Studies Authority requires that standards of performance on relevant tasks must be established by the program, to the satisfaction of the QSA, and met by students, and that students must demonstrate appropriate forms and levels of literacy and numeracy (Queensland Studies Authority, 2006; 2007).

While the program documentation does not, at this stage, include more than broad hints about pedagogy, it does include accessing a variety of sources of information, negotiation by students of a range of sites for learning, acquisition of practical skills with significant knowledge components, as well as specific bodies of information and problem solving where problems contain both ‘theoretical’ and practical dimensions at a range of levels of complexity.

As with the young Driver Awareness program, the Drive4Life program appears to meet the criterion of relevance, not only directly, by addressing road safety and driver licensing but indirectly, by embedding road safety in a range of life and vocational issues at levels of practical skills, information and conceptual or intellectual understanding. Further, it does so directly in relation to the community contexts from which participants come, and to which many of them are likely to return. It is not clear from the documentation to what extent it explores issues of road safety specifically, or of futures planning more generally, in intellectual depth through analysis of complex issues on the basis of diverse sources of information. Equally, it is not clear how far problem solving extends from relatively immediate technical and practical problems to engage with the more complex problems of Aboriginal and Torres Strait Islander communities and social and economic participation. Despite these limitations (and they are only identifiable at this stage as limitations of documentation rather than limitations of the program itself), it is clear that embedding the program in a broader set of issues and within the formal QCE curriculum and certification framework, has required program developers to attend to both pedagogical and assessment issues and thus to the question of student learning and demonstration of learning outcomes. This location within the core curriculum gives stability and a secure place with school programs, and a high participation rate, ensuring at least one place within senior schooling where issues of road safety are addressed.

Road safety issues in a local suburb

The third program we consider was a unit within the Senior Geography syllabus, designed with a view to cultivating an awareness of road safety issues, but in the context of, and explicitly focused on the syllabus requirements and objectives (Queensland Schools Curriculum Council, 2002). The syllabus requires students to conduct a research project at some stage of their course, and nominates urban geography as one area of study. This opens up space for a focus on road safety. The specific road safety focus was developed in consultations between the school and the local department of transport brokered by one of the authors, who was a member of the regional inter-agency road safety strategic planning committee. Queensland Transport road safety staff identified an issue of pedestrian safety around another school close to the high school, which they had no resources to investigate properly. The research proposal was thus presented to students as something derived from real concerns by transport safety agencies, with outputs that would inform those agencies...
and their actions. Students were understandably sceptical, but appeared willing to be convinced. This was helped, as work on the unit progressed, by inviting them, first, to participate in a public consultative strategic planning forum at which their contributions participation drew special notice and high public praise from senior bureaucrats present and, second, from Police, to make a submission about traffic policing (including deployment of mobile radar units) in the area, should their analysis suggest that this might address identified risks.

The unit began by a generalised treatment of urban transport issues. These were then given local focus for treatment in more depth by the acquisition and use of the regional road safety strategic plan, and current official crash, trauma and cost statistics for the region, city and locality. Their research entailed learning to use GPS data (an important core curricular requirement) to map crash hot spots. Acquiring such data, as well as the forum participation and information from Police about their possible submission provided students with a richer understanding of the processes of traffic and road safety planning and management, as well as the knowledge that data they were using was the best and most authentic data available. Students then framed specific problems for investigation, based on site specifics and different aspects of road safety (pedestrian safety, driving behaviour, bicycle safety and road infrastructure), and developed a range of research activities to investigate these issues further. In small task-specific working groups, they developed questionnaires and surveyed staff and parents in all surrounding schools, and conducted and recorded observational data in the form of video and still photography. They pooled their data and discussed it at a whole-class and small group level, and completed and submitted individual research reports as required by the subject work program.

My observations of their work as it unfolded over the course of the unit indicated a growing recognition of and concern about the issues they were beginning to observe, a sense of urgency to identify (as required by the research assignment task) solutions to identified problems, but, most importantly, from the point of view of road safety education, a tendency to critically interrogate their own behaviour and attitudes. The sense of growing commitment to the project not just as a school exercise but as a social ‘cause’ was reflected in their willingness to continue working – beyond the requirements of the unit and using both their own time and time that would normally have been used to begin work on the next unit (thus creating ‘catch up pressure for them as well as for their teacher) to organise a public forum on the issue, for which, as a collective exercise, they transformed their individual units into a single presentation, which they then presented to an audience of representatives from other schools transport, main roads police and town planning bureaucrats, politicians and media as well as members of the local community.

Clearly, this unit was not ‘relevant’ to students in the immediate way in which the other two programs discussed clearly are: it did not directly address a critical issue in their own lives or have direct implications or benefits to them as individuals. However, as work on the unit progressed, students clearly began to see a different sort of relevance in what they were doing – what might be described as a relevance to them as citizens with an interest in the wellbeing of their local community. Running observation notes taken as the unit progressed suggest that this sense of citizenship was not apparent in the early weeks but emerged as students engaged with the issues, most evidently as they began documenting what they saw as high risk behaviours and
situations around neighbouring schools. It was also reflected in their interrogations of their own behaviours, not in terms of their own exposure to risk, but in terms of the risk it posed for others. This sense of a civic orientation was confirmed in interviews conducted around two months after the unit had been completed: all eight (of the 16 students involved in the program) commented that they considered that the best outcome of the unit was that they ‘had made a difference’ or ‘a contribution’ to their community. We interpret this shift in light of the theoretical positions we outlined earlier. First, the pedagogic process simultaneously demanded and cultivated students’ inter-relational capacity, reflection and self-reflection. Indeed, this cultivation of inter-relational capacity, reflection and self-reflection, and the development of a sense of relevance went hand in hand. Second, we interpret the emergent sense of civic responsibility in light of poststructuralist theory as a (re)constitution of students’ subjectivities through a (re)positioning of them as active and engaged citizens, not by exhorting them to be so, but by engaging them in practices which required them to address issues of civic wellbeing as responsible citizens.

This connection of relevance to the development of inter-relational capacity, we suggest, stood in a symbiotic relation to the quality of their intellectual engagement. The unit required students to address complex (‘real’) issues on a range of scales, to grasp theory and relate it to concrete detail, thus enriching their grasps of its complexity. It also enabled them to engage with complex and sometimes seemingly contradictory information from a range of sources and to think and re-think their understanding of issues from a range of perspectives. The quality of their intellectual engagement was recognised and endorsed in a number of ways: most received marks for their assignment that were at least one grade higher than their average grade; they won a significant public award for their work and were invited to present their work as part of a Department of Premier and Cabinet showcase of ‘young achievers’; the regional Queensland Transport office asked them to submit a formal report detailing their findings and making recommendations about possible actions; and representatives were invited to a further strategic planning meeting – this time of the regional road safety strategic planning group – a group making real decisions, rather than mere consultations – on road safety strategies. The three who attended made significant contributions to the discussion and demonstrated a capacity to apply knowledge acquired in the unit to a wider range of issues and problems.

The fact that the unit was a core part of the subject workplan, governed by both the syllabus and the statewide assessment processes and requirements ensured attention to learning outcomes through assessment. Moreover, the development of the program by an experienced classroom teacher meant that the pedagogical strategies required to achieved desired learning outcomes were addressed as a core element in planning. While this clearly contributed to the evident success of the unit as a form of road safety education, the fact that it was part of a subject with no necessary commitment to road safety education per se meant that there could be no guarantee that it would address road safety issues in subsequent offerings. Finally, while embedding the unit in a core academic subject ensured full – indeed, intense - participation of all members of the class, it simultaneously meant that it reached only a relatively small minority (less than 10%) of the senior cohort.

Implications: strategies for road safety education

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Our analysis of each of these programs suggests that road safety education linked to issues of driving and driver licensing enjoys an immediate sense of relevance. Such relevance, as the students in the first of the three programs make clear, both secures their attention and gives the value of authenticity to the learning it involves. However, as the third program demonstrates, relevance can be established in ways that are less immediately obvious and rest on far more than the life stage and personal interests of students as young drivers. Both the Catholic Drive4Life program and the senior geography unit discussed here suggest ways of moving beyond immediate relevance to a deeper sense of connectedness between students and subject matter, and the wider communities of which they are a part.

The Geography unit, at least, also points to possible pedagogical strategies to develop road safety education around authentic problem solving in ways that involve intellectual depth and engage learners as subjects in ways calculated to promote taking up a positive engagement with road safety, and that certainly moves beyond fear, rational/prudential calculation or an appeal to moral sentiment to ground that engagement in a reconstituted sense of (civic) self.

The three programs offer different models for locating road safety education within school programs, and point to complex ‘cost benefit’ balance sheets in terms of student participation, pedagogical sophistication in both development and delivery programs, the capacity to draw on expertise across a range of related fields, and the ‘security’ of road safety education within the whole senior school program. The complexity of issues make it impossible to make simple recommendations about how to resolve such complexities. However, it does suggest that each approach has potential to make an important contribution to the preparation of students for their careers as adult road users and that program developers would do well to pay careful attention to the strengths of other approaches as well as the limitations of their own in revising existing programs and creating new ones.

References


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