AN EVALUATION OF SAFE ROUTES TO SCHOOL IN SOUTH AUSTRALIA

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ABSTRACT

Safe Routes to School, an intervention being implemented by TransportSA, involves state and local government and local school communities and has three components: 1) engineering treatments; 2) child and school awareness and 3) an educational intervention implemented in participating schools. An evaluation was conducted with the aim of assessing its impact and effectiveness. Using the approach of 'realistic evaluation' (Pawson and Tilley 1997) with its focus on 'what works well for whom under what conditions' the evaluation tracked implementation in seven primary schools at different stages in the implementation process and had access to nine schools which had previously implemented Safe Routes to School. Data sources included: parent surveys, site observations before and at the conclusion of the evaluation period, stakeholder interviews; and records of evaluator's field observations. This paper reports on Safe Routes to School as a framework for identifying and implementing local engineering changes and changes in traffic and pedestrian behaviour patterns.

Key Words: safe routes to school, child pedestrian safety, evaluation

INTRODUCTION

Safe Routes to School

Transport SA has, since 1998, been implementing a Safe Routes to School program, based on the program of the same name developed by VicRoads. At the time of writing, the program has been implemented in 68 primary schools, and with the involvement of 10 metropolitan and 4 rural local government councils.

The program is locality-based and aims to improve the road safety of children travelling in their local area. As implemented in SA, Safe Routes to School addresses the issue of primary school aged pedestrians, cyclists and passengers. Through an interactive process involving Local Government, schools, community groups and Transport SA, Safe Routes to School identifies risk factors involved in child pedestrian safety and develops integrated engineering and education action plans to improve road safety.

The program uses information obtained from a survey completed at home by children and the parents in order to identify:

- ?? how children travel to and from school (i.e. as pedestrians, cyclists or passengers), and why they choose this mode of transport
- ?? routes that children use to travel to and from school
- ?? difficulties that children experience on those routes as pedestrians, cyclists and passengers

Together with data collected at local problem traffic locations this information is used to determine engineering improvements and shape educational strategies. Once engineering treatments are in place, teachers are assisted by Transport SA in planning their school's traffic safety curriculum to teach children how to use the facilities appropriately. The education phase of Safe Routes to School also encourages children to adopt safer behaviour when travelling as pedestrians, cyclists and passengers.

Road Ready

Road Ready, the educational resource used by schools involved in the Safe Routes to School program, was released in 1998. This traffic safety education curriculum resource developed by Transport SA and designed to teach children to adopt safe behaviour and practices when travelling as pedestrians, cyclists and passengers, is aimed at primary school aged children (Reception to Year 7). It includes specific activities for the junior, middle and upper primary areas of the curriculum and units of work are linked to the national educational Statements and Profiles. The development is underway of resources designed for students at high school level.

Road Ready includes classroom activities combined with real traffic experiences to reinforce safe road-use behaviours as well as activities that encourage parental participation and home discussion. It can be used to

support and reinforce engineering improvements made in the local area, and address behavioural issues identified around the local school.

Australian Context
At the time of Geoff Rose's review of the implementation of Safe Routes to School programs across Australia, reported originally in 1999 ((Rose 2000)) South Australia was placed, within a three-level categorisation, between the extremes of 1) states/territories on the one hand where Safe Routes to School programs have a fairly low profile or where there is limited initiative and 2) Victoria and Western Australia on the other where mature programs were operating. It is contended here that, in the interim, South Australia has moved into the category of a mature and sustainable program. Rose identifies the features that could be regarded as integral to an effective Safe Routes to School program:

> Of critical importance is the need for a balance across the four Es (engineering, enforcement, encouragement and education) and the recognition of the integral nature of the engineering component. Maintenance also needs to be explicitly considered in the context of SRTS programs. This applies not only to the maintenance of the physical infrastructure, but also to the sense of ownership of the program and continuation of the education component as well as to the enforcement and encouragement dimensions. ((Rose 2000:14)

Safe Routes to School in South Australia did not include a significant enforcement component. This aside, the balance between components, the integral nature of the engineering components and attention to maintenance across the program were marks of its success where it worked well, as shall be reported below.

Rose anticipated that, while the dominant objective to date of Safe Routes to School programs is to improve safety, "health, environmental and social objectives have the potential to influence the future development of SRTS in Australia" (Rose 2000:8). In South Australia health and environmental issues were included in the original conceptualisation of Safe Routes to School and in its ongoing development and reformulation during implementation. However, concern for traffic management emerged as the dominant focus 'on the ground' during implementation.

EVALUATION

The evaluation was based conceptually in a realistic evaluation framework (Pawson and Tilley 1997). Rather than measuring against pre-determined outcomes, this evaluation approach attempted to determine "what worked for whom in what circumstances".

The aim of the evaluation was to assess the impact and effectiveness of Safe Routes to School. The objectives to achieve this were:

1. to assess the impact of the Safe Routes to School Program
2. to track the progress of implementation of the program and identify factors necessary for success; and
3. to assess the impact of the Safe Routes to School Program on pedestrian and passenger safety of the primary school children in schools that participated.

The methodology included:

Intensive Implementation Tracking
The tracking of the implementation of Safe Routes to School in four (4) primary schools of different types, including one rural school, taking a 'vertical slice' at different times in the school year through school visits, consultations and interviews.

Less-Intensive Implementation Tracking
The tracking in a less intensive manner than undertaken in (1) of an additional 3 schools to provide a greater overview of the implementation process.

Key Stakeholder Consultation
Toward the end of the evaluation period, major on-site consultations were conducted with key stakeholders from each of the seven primary schools to ascertain the perceived impact of Safe Routes to School.

Literature Review
A review of current literature relating to pedestrian safety of school children and the evaluation of interventions was undertaken.

At the time of writing, the collection of the evaluation data collection is complete. The analysis has been begun and preliminary findings are emerging. This paper draws on those preliminary findings.

PRELIMINARY FINDINGS

The assumption of the Safe Routes to School program, and its evaluation, is that it is an integrated and coherent whole. The evaluation found that it worked best in those localities where the component elements - engineering treatments; child and school awareness; and the educational intervention – worked in interaction to strengthen each other. However, it is also the case that while TransportSA conceived, implemented and maintained the program as a comprehensive strategy, particular stakeholders more commonly considered it ways reflecting the concerns of their professional cultures, interests and concerns. While there were various ways in which stakeholders expressed concerns for safety, health and the environment, the point at which most stakeholders found common ground was in terms of traffic management.

Schools
As the implementation of Safe Routes to School progressed in South Australia, more and more attention needed to be paid to the specific internal cultures of the participating schools and the implications of broader educational changes, such as a shift towards local school management which raised questions of how schools made decisions to include Road Ready into the curriculum. Schools proved not to be uniform in their reception of the program. The evaluators have developed a model of sustainable take-up of the program, which takes into account: the presence of a champion for the program in the school, the nature of leadership given to the program by the principal, the place of whole-of-school policies and the processes by which decisions are made inside the school about core curriculum.

Transport SA developed a capacity to respond to the needs of schools and their cultures as the implementation of the program and the evaluation proceeded. Examples of this responsiveness to the changing requirements of schools include the development of Road Ready in-servicing for teachers and the development of resources (Way to Go) to incorporate the support and assistance of parents.

A point at which the culture of the schools responded to the broader environment was in the incorporation, as part of the teaching, of engineering treatments that were installed as part of the programs. A mark of the success of the program for most schools was the improvement of traffic management around the school in a way that took road safety off the list of top concerns of the school. All schools where the program had moved beyond the planning phase reported shifts and changes in patterns of pedestrian and vehicle movement (students and parents) and in directions which the school community assesses as being safer. This aspect of the evaluation will be reported in more detail in future papers.

One of the ways in which school communities expressed this was to express relief that what had been a long-term ‘festering sore’ was no longer a seemingly unmanageable problem for the school. In some schools there was evidence that the program had given the school the confidence to handle the ongoing and emerging traffic management problems of the school in that they now felt that they had some capacity to analyse traffic problems and speak about them in ways that brought them into productive dialogue with TransportSA and the local government authorities.

Local Government Traffic Engineering
Most of the local government traffic engineers were extremely positive about Safe Routes to School and the benefits it bought to them. A major benefit, as perceived by these traffic engineers, was that it provided a framework for the facilitation for their standard practice, and it meant that they were able to often get results more quickly than would have been the case in the past. The parent surveys and the on-site observations, and the direct links for consultation with the school communities led to more rapid outcomes. The quality of the resultant community consultation, backed with local data, also provided (or hastened) political and organisational support to the engineer in securing resources for engineering treatments.

Some of the engineers pointed out the value that Safe Routes to School afforded in the aggregation of views of schools in a region, thus shedding new light on a problem and its extent because of the cumulative view produced by a system of inter-relating schools.

Value in Program

Some schools and, to a lesser extent, some traffic engineers were guarded in giving Safe Routes to School excessive credit for the changes that were being registered in the evaluation. The view sometimes put was that the program merely complemented what was already being done. The contribution of the program in these cases was seen in terms of adding value and there was little interest in a statewide or ongoing strategy involving other professions and localities. What was valued was the solution of immediate local problems within their own discipline. The point at which these narrower local views overlapped was in solving problems of traffic management (making safety, health and environmental issues supplementary).

Rose (Rose 2000:15) made the point that there is clearly a need for greater consideration of outcome evaluation in the context of Safe Routes to School. While pre- and post- site observations and accounts of changes in patterns of pedestrian and traffic flows were gathered as part of this evaluation, it is apparent that the effects of programs such as this are too subtle, too dispersed and spread over too long a span of time for the use of crash data to be the sole measure of effectiveness.

CONCLUSION

In conclusion, and in taking the broadest possible view of the impact and effectiveness of the implementation of Safe Routes to School in South Australia, the evaluators invoked a model of success in community-based interventions. Howat *et al* (Howat, Jones *et al*. 1997) used a health promotion planning model in Western Australia to devise a child pedestrian injury prevention program. In considering this and other road safety programs from the perspective of community participation and health promotion, ten significant barriers to community participation were identified (Howat, Cross *et al*. 2001):

Personnel Issues

- a reduction of special capital
- lack of time of community members
- lack of leadership
- lack of relevant skills and knowledge of community members

Planning Issues

- adherence to one approach or process
- top down or bottom up planning
- inappropriate program focus
- inappropriate program evaluation
- lack of funds and resources
- lack of sustainability

(Howat, Cross *et al*. 2001:261)

In the face of stakeholder involvement, limited in some ways by the professional cultural and interest context in which they were placed, TransportSA has been successful in implementing Safe Routes to School to the extent that it overcome these kinds of barriers through awareness of key interests and the co-ordination of the various partial visions. It has managed to save personnel time through the program framework, encourage leadership and build skills and knowledge through the provision of resources and training. To the extent it has been successful TransportSA has: been flexible in approach; engaged with various levels of the organisations it involved, kept a program focus and responded to evaluation findings; been committed to the supply of resources and has been clear in its commitment in the long-term.

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