Looking at Program Sustainability: Identifying Factors in Two Educational Initiatives in Victoria

Dr Graeme Harvey¹ Office of Strategy and Review Department of Education & Training East Melbourne, Victoria 3001 AUSTRALIA harvey.graeme.lg@edumail.vic.gov.au Associate Professor Rosalind Hurworth Director, Centre for Program Evaluation Faculty of Education The University of Melbourne Victoria 3010 AUSTRALIA <u>r.hurworth@unimelb.edu.au</u>

Presented at the: Australasian Evaluation Society International Conference Brisbane

> 10-12 October 2005 www.aes.asn.au

¹ The views expressed by the author are his own and do not reflect those of the Department of Education & Training.

Looking at Program Sustainability: Identifying Factors in Two Educational Initiatives in Victoria

ABSTRACT

This paper examines two recent, successful school-based health initiatives in Victoria, particularly in relation to factors that seem to foster program sustainability. These programs, dealing with drug education and healthy eating, are described before presenting two different methods (individual and group) used to determine elements that allow for the continuation of such projects. The findings on sustainability from each program are discussed using the broad areas of factors associated with the programs themselves; those associated with the context in which the programs were implemented; and finally, those factors external to the programs and the their implementation contexts. These results indicate a strong congruence with factors identified in the literature but also highlight the influence of the use of change theory in strengthening sustainability approaches in program development as well as the need to focus on funding options in forward planning. The possible roles for evaluators in assisting program development and supporting the integration of factors supporting sustained use are also discussed.

Introduction

In the evaluation world, up till now, work has concentrated mainly on 'front end' end evaluations such as needs assessment or strategic planning or, later on with an intervention in place, the monitoring and impact of programs. However, informing stakeholders that an initiative has been designed well, or been successful, is no longer enough-- because quite often, after funding ends or staff leave, such programs can collapse. Therefore, the evaluator is being asked to take on a new role where the question is; 'How is this program going to be sustainable in the future?' Consequently, this paper describes how two evaluators looked into the matter of sustainability associated with two very different but successful school-based health programs in Victoria, in order to determine the factors that seem to affect the continuation of such programs. First though, the term 'sustainability' needs to be defined.

The meaning of sustainability

Multiple understandings of the term sustainability exist along with a range of related terminology including institutionalisation (Goodman & Steckler, 1989; Miles, Eckholm, & Vandenburge, 1987) and routinization (e.g. Rogers, 1995; Yin & Quick, 1979). Although each term implies the continuation of a program in some way, different emphases of meaning have been noted (Shediac-Rizkallah & Bone, 1998). These include whether the focus is on continuation of the benefits of the program to the stakeholders/participants; the perseverance of the new initiative itself (e.g. Goodman & Steckler, 1989); or the process of developing local capacity to enable a program to be maintained at the stakeholder/community level.

In some ways, this lack of consensus may be more reflective of the different objectives and theoretical positioning of the programs themselves. Consequently, Shediac-Rizkallah and Bone (1998) suggested three differing perspectives that shape different understandings of sustainability. These were developed from concepts related to public health, organisational change and community capacity building. Each reflects a different locus for the development of sustainability and a different expectation about how each stage will be recognised.

Furthermore, the latter authors suggest that a singular definition of sustainability is probably not possible, or even appropriate. Instead, they propose a broad explanation for sustained use that encompasses the "concept of [a] continuation process ... [and the] diversity of forms that this process may take" (1998, p. 92]. In this way a working meaning can be given to sustainability based on the recognition that any effective definition will need to reflect the specific expectations of the program or setting to which the word sustainability is being applied.

Replication or separate stage of program development?

Models of program development often present sustainability as the end stage of a linear process (e.g. Rogers, 1995). According to this way of thinking, sustained use follows (automatically) from the replication of program during implementation. As a consequence, this model tends to support the notion of sustainability as a consequence of effective implementation requiring little independent support or planning to ensure its achievement (Goodman & Steckler, 1989).

However, this position has been challenged to suggest that sustainability may constitute a distinct stage of program development (Yin & Quick, 1979). This view has been supported by the recognition of particular requirements for sustained use in the areas of, for example, funding arrangements (Akerlund, 2000; Scheirer, 1990), training (Elias, Zins, Graczyk, & Weissberg, 2003; Osganian, Parcel, & Stone, 2003; Shediac-Rizkallah & Bone, 1998), and support (Huberman & Miles, 1984; Scheirer, 1990). Further, it has been indicated that the necessary conditions required for sustainability, need to be planned for at the early stages of program development (Altman, 1995; Goodman & Steckler, 1989; Paine-Andrews, Fisher, Campuzano, Fawcett, & Berkley-Patton, 2000). Therefore, these understandings tend to suggest that sustainability may develop from a more interactive relationship between the different stages of program development and may not be based on a simple linear process (Gans, Bain, Plotkin, Lasater, & Carleton, 1994).

It has also been suggested that the process of program development (including sustainability) cannot be understood in isolation from the context in which the program is operating (Stange, 1996, Goodson, 2001). From this position, actions undertaken to initiate sustained use are mediated through the differing structures and practices within individual settings and so create a unique set of factors for establishing sustainability. Such conditions suggest that the process for embedding new initiatives may be more complex and interactive than implied by the linear models of program development.

With such definitions in mind we now turn to describing the two initiatives upon which this paper is based: Turning the Tide in Schools (TTIS) and Collingwood College Kitchen Garden (CCKG). Both were known to be successful programs that have not been looked at in terms of sustainability.

Description of the Programs and Level of Success

Turning the Tide in Schools

The Turning the Tide in Schools (TTIS) drug education strategy is a major Victorian Government initiative to support the use of effective drug education in schools. The program was implemented in Government schools over a three-year period beginning in 1997. Responsibility for managing the development and implementation of the TTIS was undertaken by the State's Department of Education.

The central objective of TTIS was to enhance and sustain drug education in Victorian schools in order to contribute to the minimisation of the harm associated with drug-use by young people. The main focuses of the TTIS strategy were based on the need to:

- Establish drug education as an ongoing core component of the school curriculum
- Develop new course materials, improve links with specialised community services, and trial strategies for assisting those students most at risk of long-term drug abuse
- Increase teacher confidence and skill in the delivery of drug-related curriculum and welfare.

(Department of Education, 1998)

The central component of TTIS was the development of an Individual School Drug Education Strategy (ISDES) in all Victorian Government primary and secondary schools. The aim of this process was to assist schools to identify their drug education needs and in the implementation of drug-related curriculum and welfare goals.

In implementing the ISDES, the importance of forming a team of key school community members to drive the process was emphasised. This group was to be known as the Core Team and was to be responsible for the implementation process. It was suggested that membership of the team needed to include community representatives and parents, the school principal or assistant principal, the coordinators of the Health and Welfare areas and staff members from other curriculum areas.

The establishment of the ISDES was supported by the development of guidelines and the provision of resources by the Department of Education. One specific resource to assist the implementation of the TTIS strategy was the establishment of the Regional Drug Education Facilitator (RDEF) position. For

the initial three-year period (1997-1999), nineteen RDEFs were appointed. These officers were distributed across the nine education regions of Victoria and were assigned to clusters of schools. Their main role was to support the work of the Core Teams established at each campus. Aside from this function, the role included:

- Providing professional development for staff and school community members
- Establishing links with community agencies and support services
- Providing drug-related curriculum and welfare advice
- Acting as a resource for drug education curriculum materials.

(Department of Education, 1998)

An evaluation of the program in 1999 indicated that the initial roll-out had been mostly successful in supporting schools to identify their drug education needs and prepare a drug education strategy.

Collingwood College Kitchen Garden

Meanwhile the Collingwood College Kitchen Garden project was instigated in 2001. The inner-city school was approached by Stephanie Alexander, renowned chef and author to introduce an innovative approach to teaching students about healthy, delicious food through both growing and cooking it. The Program was also seen as a way to fight the current national concern of obesity in children. The Kitchen Garden Program currently involves all 120 students in Years 3-6. Each student spends a 50 minute lesson in the garden and a 90 minute lesson in the kitchen.

The architect-designed garden itself is located in an area of the school that was once part of the oval. Parents and staff helped to prepare this selected area and garden classes, under the supervision of a professional gardener, commenced in July 2001. Over the next few months students planted vegetables, herbs and an orchard and the garden produced its first crop in November that year. Then kitchen classes began in Term 4 with the appointment of a professional chef. To assist, the school recruited a number of adult volunteers to help children in both the kitchen and the garden. Furthermore, there were donations of all kinds from local businesses.

<u>Objectives of the Program</u>: The Kitchen Garden Project was established with six major objectives in mind. These were to:

- 1: Enhance students' knowledge of how things grow and taste
- 2. Increase students' skills in gardening, cooking, planning and teamwork
- 3. Instil positive attitudes re the environment and each other
- 4. Improve school-community relations
- 5. Integrate this activity with other areas of the curriculum such as English, Maths, Environmental Science, Science, Health and the Arts
- 6. Involve students in physical activity.

The Program was originally planned as a one-year project but soon after its successful inception this was extended by another three years.

Why was there a need to investigate sustainability?

Turning the Tide

The TTIS initiative constituted a considerable investment by Government of approximately \$13 million over the period 1997-1999. Although there was considerable political support for the project, the high level of funding and broad Government support was unlikely to continue. Therefore, there was a need to identify key components within the initiative as well as positive aspects of the implementation framework that supported sustained use. Once identified, efforts could then be made to ensure the continuance of these elements within the operational structure of the program.

Collingwood College Kitchen Garden

The need to examine sustainability of the CCKG arose from two sources:

a) Similar to Turning the Tide, the School realised that the initial funding support, support in kind and initial goodwill was likely to dry up and were concerned that the Program could no longer be supported and sustained

b) The Victorian Schools Innovation Commission (VSIC) had selected Collingwood College as one of eight schools to examine how successful innovations can become embedded into school cultures. The CCKG Program was selected on the basis of: whole school engagement; the successful operation of the program for two years; direct links with learning outcomes; demonstrated community connections; and because the program would be of interest to other schools. There were also evident benefits such as improved learning and well-being, positive engagement of students and increased involvement with the wider community. Therefore, the Program was perceived to be 'a best practice model of excellence' and so, VSIC wanted to see how sustainability could be achieved in such an innovation.

Approaches used to determine sustainability factors

Turning the Tide

To try and understand the factors in the TTIS initiative that fostered sustainability, a qualitative study was undertaken by one person. The study involved semi-structured interviews with personnel from three levels of the program's initiation and implementation. These included staff from the Department of Education's Drug Education Unit responsible for policy and resource development; officers appointed to work in the nine educational regions across Victoria with the responsibility of supporting school to implement TTIS; and, school-based personnel in seven selected schools. The use of these three groups allowed for the triangulation of data sources, one of the means used to maintain the rigour and trustworthiness of the research process.

Of the seven schools selected for the study, six were identified as successful in embedding a drug education strategy in their school. This selection process utilised the results of the evaluation undertaken in 1999 to identify effective schools. Further verification was sought from the regional personnel involved directly with the implementation process. The seventh school was a campus indicated as 'less successful' in establishing its drug education program. This school was included so that any emerging themes from the main group of schools concerning sustainability could be compared and tested with this site.

The Collingwood College Kitchen Garden

The key question was to find key conditions/models needed for innovations to be sustained. To answer this it was also necessary to examine: how innovations commence; what impediments there are when introducing an innovation; how schools overcome difficulties; how an innovation becomes mainstream, what outcomes there have been for students, staff and the community to demonstrate the effects of innovations; and to discover what factors affect outcomes e.g. levels of support, resources and curriculum development. From this core questions included;

What generates and sustains good innovative practice?

How can any initial difficulties be overcome?

What outcomes can be expected from such a program?

How can such practice be sustained and become 'mainstream?

What conditions need to exist for programs to continue?

How could sustainability elements be transferred successfully to other school innovations?

In order to answer these questions there were three types of research activity;

- a) Through Actor-Network Theory² where a researcher from VSIC worked with the site researcher to negotiate particular pieces of research activity
- b) A 'Research and Innovation Circle' involving major stakeholders from the site plus a representative from a sister site (who were learning from the major successful site). This process is outlined in Figure 1.
- c) Joint workshops of all research sites to discuss common aspects of innovation, what sites were trying to achieve and what challenges there were in trying to sustain programs.

Figure 1: Beyond the Pilot research methodology framework

² Key theorists in this area include Callon (1986; Callon & Latour, 1981); Latour (1996) and Law (1986)

BEYOND THE PILOT RESEARCH METHODOLOGY FRAMEWORK



Consequently at each site there were two major people involved in collecting and dealing with information. One was to see to most of the research carried on at the site and one was to act as a critical 'overseer and friend'. On site, the major researcher was asked to; document all aspects of the innovation under investigation; interview all major stakeholders about the project; collect examples of the project using visual media; and to write up the case.

Then the critical friend concentrated on the 'bigger picture' aspect. For instance a group interview was held with major stakeholders to discuss what had worked; what were the issues; what lessons had been learnt; what elements could be transferred, what advice could be given to other schools and how such programs could be sustained.

Eventually the findings of all aspects were to effect change at the systemic level through recommendations made to policy makers about innovation.

Discussion on the results from each study

Three general areas of influence on the implementation and sustained use of programs have been suggested by Shediac-Rizkallah and Bone (1998) and Fullan (1996). These areas relate to the:

- 1. Program and related planning and implementation processes
- 2. Context or setting where the initiative was established
- 3. Environment external to both the program and its implementation context.

These three elements have been used as a framework for the discussion of the findings from the two projects.

1. Sustainability factors related to the specific programs and their planning and implementation

Turning the Tide in Schools

The strong program design and supporting implementation strategy appeared to be critical features in the successful embedding of the TTIS at the different school sites. The underlying design of TTIS emphasised school community involvement and ownership, identification of local needs, links with existing policies and structures and the need for training to support the implementation process. Importantly, the development by each school of an Individual School Drug Education Strategy (ISDES), offered the opportunity for each school community to find their individual 'level of comfort' in dealing with issues associated with drug use and for providing input into the way drug education should be managed at their campus.

Important within the program design was the inclusion of the Regional Drug Education Facilitator (RDEF) role. This element provided an important support in both the implementation and maintenance of the program. Personnel in this position were able to provide both the 'expert' knowledge and facilitation skills required to address staff and parent concerns and to work through the different value issues generally associated with drug education and more specifically, the harm minimisation approach. Importantly, this support was ongoing so that advice could be readily obtained when specific drug-related incidents occurred or resources for the drug education curriculum were needed.

While such external support was an important component in establishing the TTIS in schools, a further essential feature of the program design was the requirement to establish a Core Team in each school. When this group was appropriately established i.e. when it contained representation from all parts of the school community and school personnel with appropriate status and ability to influence decision-making, the team provided a powerful influence in motivating change and ensuring that the policies and procedures of TTIS were able to be embedded as part of a school's curriculum.

An additional feature that also appeared to assist with the establishment and long-term use of the program was the use of evidence–based research in the development of the program and its supportive implementation strategy. Understandings of best practice in drug education were combined with current knowledge about the management of the change process in schools. The use of this broad theoretical underpinning appeared to strengthen the specific design of the strategies for planning and teaching a drug education programme and to ensure that these components were set in a purposeful and tangible process for change. This integration of change theory into the program design provided a greater assurance that the program would be effectively established effectively and was more likely to be sustained at the school level.

Most importantly, the program design seemed to enhance a school's ability to intervene and take action. This involved the ability to engage stakeholders across the school community and the capacity of the principal to devolve responsibility effectively for the initiative's implementation across the middle leadership group. Through implementing the program processes and structures designed for the TTIS it appeared more likely that a school would establish an effective support base for the establishment and maintenance for TTIS.

Although not an initial feature of the program, a resource for schools to monitor and report on their performance against a series of drug education outcomes was made available to schools.

Collingwood College Kitchen Garden

Collingwood College also had developed a strong plan (originally to seek funding) and it included how to integrate the practical aspects within the school curriculum. Planning was considered important for: timetabling; curriculum articulation later sustainability with considerations about: succession planning; future development stages; risk management; and ideas on how to engage parents.

The plan was also backed up with professional expertise, such as the culinary background possessed by Stephanie Alexander, and plans for the garden being drawn up by a professional architect. Using specialist staff rather than teachers also meat that it created a different environment from the traditional classroom.

The underpinnings of the CCKG Program also expected certain year level involvement as well as connections to be made with the wider community. In fact the school expected a great commitment and contribution to encourage ownership of the program (e.g. every Grade 3-6 teacher is involved and the pupils assisted in designing the garden beds and the local community came in to assist with bed construction.)

Another part of the community connection was the use of a team of volunteers to service both the garden and the kitchen. This team of people provided, and continue to provide, important support to sustain the program.

Again while such support from external sources was an important factor from the outset, another essential component of the CCKG was the formation of a group of committed staff, particularly in the primary part of the school. These were the staff who became dedicated to the initiative and made sure that knowledge learnt in the garden and kitchen was applied to other areas of the curriculum.

In addition, the CCKG is genuinely a 'living place' within the school. It is not cordoned off and there are no rules to keep away. Children play there during the school day and adults visit it.

2. Sustainability factors linked to the context or setting where the initiative is established

The context or setting into which programs are implemented can also influence the uptake of an initiative and its likely sustained use

Turning the Tide in Schools

In the case of TTIS, the most important supportive contextual feature was generally based on the climate of the school and the support the program received from the principal and other school leaders.

In those schools that had maintained the TTIS program there was generally a positive acceptance of the program. In most cases, this approval was based on a belief that the specific drug education approach of the TTIS formed a part of a broader concern with student welfare and improved student outcomes. In addition, staff enthusiasm was supported by the active involvement of the senior school leadership in indicating the way TTIS was linked with the general goals of the school and by providing the motivation and resources to support the program. As such, there was a sense that the program would constructively contribute to the overall teaching program and the improvement of student performance and welfare.

Along with the support of the principal and other key school leaders, the school members of the Core Team also tended to act as key internal program champions. In most instances, they were closely associated with the learning areas associated with the program but there also generally held positions of responsibility that provided them with a higher degree of influence. Outside of the school, the RDEFs also played an important role as program champions along with their ability to provided expertise and advice. Many schools also used existing networks between schools to advocate for TTIS and to share resources and approaches in implementing the drug education curriculum.

Another feature of the school climate was a positive orientation to change and development. Most staff had a clear commitment to continuous improvement and saw the implementation of the TTIS as part of this process.

Collingwood College Kitchen Garden

Similar to TTIS a primary influence on the success and sustainability of the CCKG program was the value and belief system of the school, driven mainly by the Principal. She provided the greatest motivation and fought continually for funds to support the Program. Such approval and practical assistance was grounded in a firm belief that the local children, who are mostly from low SES homes, were not eating healthily. She also fostered the idea that the Program could contribute to the mainstream teaching program and made sure there was effective communication about aims and objectives.

Consequently, this Principal, along with Stephanie Alexander, the specially appointed staff as well as key teaching staff became program champions and passionate 'drivers' of the initiative. One way that this was manifested was that in the 'Beyond the Pilot' Project Collingwood College took on a 'Sister School', located in St Albans. The latter instigated a small kitchen garden and a dedicated member of staff came to Collingwood College to see what was happening. This teacher came to meetings and attended special events. In turn Collingwood College staff went to St Albans to learn about their composting and cooking arrangements.

Another part of the context that led to sustainability was to make the most of local businesses and organizations (such as Lions and Rotary). Consequently, the Victoria Market supplied extra food and ingredients when crops were low; companies supplied goods; and local organizations became ongoing sponsors.

Although these features were linked to the context of where the programs were established, it seems that elements such as leadership, engagement and championship could be encouraged as part of the program design for the introduction of any innovation.

3. Sustainability factors linked to the environment external to both the program and its implementation context.

Supportive factors externally provided additional assurance that there was broader commitment to the programs and assisted to reinforce their continuation.

Turning the Tide in Schools

There were strong indications of political support for TTIS and a clear indication that the initiative was a priority for the Government. The initial involvement of high-level politicians and bureaucrats resulted in a perception of explicit encouragement and support for the program. With such championship, it was felt that by program stakeholders that the program was likely to be continued and was more than a 'one-off' intervention.

Collingwood College Kitchen Garden

For Collingwood College's Program there has always been reliance on external funding. Originally there was a considerable sum given as a seeding grant. The concern from then on was how was the program to be maintained because of the particular need to find salaries for the Gardener and Chef. Many submissions for funding from various political and philanthropic organization were written but without success. However, there has been a continual publicity and media campaign to promote the Program, raise the awareness amongst potential donors and sponsors and to attract volunteers. This has included the production of videos, journal articles and TV programs about the garden. As a result of such promotion the Stephanie Alexander Foundation was set up in 2005 to support the CCKG. The Foundation provides a capital base from which an income can be drawn in perpetuity. It meets taxation requirements and ensures on-going funding for staffing, equipment, seedlings and extra ingredients.. A secure financial base should ensure the continuity of the project.

Furthermore, since the inception of the Kitchen Garden there has been huge interest and debate generated about the standards of food given to children (e.g. campaigns to have better tuck-shop food and TV Programs such as Jamie Oliver's series 'School Dinners') and the enormous press coverage about children's obesity in Australia. All this has given impetus to the CCKG Program so that now there would probably be a huge outcry if the Program was not to continue.

How Do These Findings Relate to the Work of Others?

To conclude it is useful to review these findings in the light of what other researchers and evaluators have concluded to be factors affecting sustainability. This can be presented in a number of tables:

AUTHORS	SUSTAINABILITY FACTOR	PERTINENCE TO TTIS OR CCKG
Akerlund, 2000; O'Loughlin <i>et al.</i> , 1998; Rosenheck, 2001; Steckler & Goodman, 1989; Rogers, 1995	Congruency with local needs	Pertinent to both
Atkins <i>et al.</i> , 2003; Rosenberg & Jackman, 2003; Smith <i>et al.</i> , 1995	Active engagement of stakeholder involvement	Pertinent to both
Goodman & Steckler, 1989; O'Loughlin <i>et al.</i> , 1998; Surry & Ely, 2001	Capacity for 'mutual adaptation' within the program	TTIS
Lofton, Ellett, Hill & Chauvin, 1998; Goodson et al., 2001; Evashwick & Ory, 2003	Ability to be accommodated within existing organisational structures	Pertinent to both
Elias <i>et al.</i> , 2003; Osganian <i>et al.</i> , 2003; Shediac-Rizkallah & Bone, 1998	Availability of training	TTIS
Lofton <i>et al.</i> , 1998; Hall, 1992; Atkins <i>et al.</i> , 2003	Links with program-related external agencies	Pertinent to both
Elias <i>et al.</i> , 2003; Goodson, 2001	Regular monitoring and evaluation	TTIS
Atkins <i>et al.</i> 2001; Akerlund, 2000; Shediac-Rizkallah &	Forward planning for continuance	Pertinent to both

Table 1: Sustainability factors related to program planning and implementation suggested by the literature and the congruency with TTIS and CCKG

Bone, 1998		
Lefebvre, 1990	Marketing and promotion	CCKG

Table 2: Sustainability factors suggested by literature that are linked to the context or setting where initiatives are established and their congruency with TTIS and CCKG

AUTHORS	SUSTAINABILITY FACTOR	PERTINENCE TO TTIS OR CCKG
Goodson <i>et al.</i> , 2001; Shediac- Rizkallah & Bone, 1998; Steckler & Goodman, 1989	Institutional strength i.e. the stability and maturity of organisational structure and a clear articulation of goals and objectives	Pertinent to both
Parcel et al., 1995	Positive climate in setting/organisation	Pertinent to both
Elias <i>et al.</i> , 2003; Evashwick & Ory, 2003; Smith <i>et al.</i> , 1995	Leadership engagement and support	Pertinent to both
Goodman & Steckler, 1989; Shediac-Rizkallah & Bone, 1998	Internal and external program champions	Pertinent to both
Goodman & Steckler, 1989; Rosenheck, 2001	Formation of coalitions and networks	Pertinent to both
Huberman & Miles, 1984; Scheirer, 1990	Availability of expertise/advice	Pertinent to both
Rotheram-Borus <i>et al.</i> , 2001; Klingner <i>et al.</i> , 1999	Knowledge of program theory	TTIS
O'Loughlin et al. 1998	Adequacy of staffing	Pertinent to both

Table 3: Sustainability factors suggested by literature that are linked to the external environment and their congruency with TTIS and CCKG

AUTHORS	SUSTAINABILITY FACTOR	PERTINENCE TO TTIS OR CCKG
Pentz, 2000; Shediac- Rizkallah & Bone, 1998	Political and social climate	Pertinent to both
Elias <i>et al.</i> 2003; Akerlund, 2000; Shediac-Rizkallah & Bone, 1998	Community involvement	Pertinent to both

Tables 1-3 reveal that the majority of both projects' sustainability factors are aligned with those suggested by other authors. Some additional factors were also apparent. In the TTIS, the use of change theory to embed effective change practices into the program and its implementation process was critical. These structures linked with a number of the noted sustainability factors such as mutual adaptability, establishing program champions and assisting school ownership. Of interest these change elements appeared to be most effective where schools themselves demonstrated an overt understanding of the process of school change. Additionally, the Collingwood Community Kitchen Garden program highlighted particularly the need for forward planning to identify and promote opportunities for future funding.

Overall, the experiences of the authors across these two projects suggest the importance of planning for sustainability from the inception of any initiative. Strong planning can support sustainability factors across the areas of program and implementation as well as some contextual factors. As such, evaluators may be able to play an important role in this process through a focus on clarificative evaluation (Owen, 1999) at the early stages of program development to ensure an integration of these elements. Further, evaluators should support the use of regular monitoring and evaluation to identify and communicate success – an important element in assisting the sustained use of any program.

References

Akerlund, K. M. (2000). Prevention program sustainability: the State's perspective. <u>Journal of</u> <u>Community Psychology, 28</u>, 353-362.

Altman, D. G. (1995). Sustaining interventions in community systems: on the relationship between researchers and communities. <u>Health Psychology</u>, 14, 526-536.

Atkins, M. S., Graczyk, P. A., Frazier, S. L., & Abdul-Adil, J. (2003). Towards a new model for promoting urban children's mental health: accessible, effective, and sustainable school-based mental health services. <u>School Psychology Review</u>, 32, 503-514.

Callon, M. (1986). Some elements of a sociology of translation: domestication of the scallops and the fishermen of St Brieuc Bay. In J. Law (Ed.). <u>Power, Action and Belief</u> (pp196-233). London: Routledge.

Callon, M. & Latour, B. (1981). Unscrewing the Big Leviathan: how actors macrostructure reality and how sociologists help them to do so. In K. Knorr-Cetina & A. V. Cicourel (Eds.). <u>Advances in Social</u> <u>Theory and Methodology: Towards an Integration of Micro- and Macro- Sociologies</u> (pp. 277-303). Bosto, MA:Routledge & Kegan Paul.

Department of Education. (1998). <u>Individual School Drug Education Strategy Guidelines</u>. Melbourne: Department of Education.

Elias, M. J., Zins, J. E., Graczyk, P. A., & Weissberg, R. P. (2003). Implementation, sustainability, and scaling up of social-emotional and academic innovations in public schools. <u>School Psychology Review</u>, <u>32</u>, 303-319.

Evashwick, C., & Ory, M. (2003). Organizational characteristics of successful innovative health care programs sustained over time. <u>Family and Community Health, 26</u>, 177-193.

Fullan, M. G. (1996). Implementation of innovations. In T. Plomp & D. P. Ely (Eds.), <u>International Encyclopedia of Educational Technology</u> (2nd ed., pp. 273-281). London: Pergamon.

Gans, K. M., Bain, S. L., Plotkin, B., Lasater, T. M., & Carleton, R. A. (1994). Implementation and institutionalization of heart health programming in schools: the Pawtucket Heart Health Program experience. Journal of Health Education, 25, 89-96.

Goodman, R. M., & Steckler, P. H. (1989). A model for the institutionalization of health promotion programs. <u>Family and Community Health, 11</u>, 63-78.

Goodson, P., Murphy-Smith, M., Evans, A., Meyer, B., & Gottlieb, N. H. (2001). Maintaining prevention in practice: survival of PPIP in primary care settings. <u>American Journal of Preventive</u> <u>Medicine</u>, 20, 184-189.

Huberman, M., & Miles, M. (1984). <u>Innovation up Close: How School Improvement Works</u>. New York: Plenum Press.

Klingner, J. K., Vaughan, S., Hughes, M. T., & Arguelles, M. E. (1999). Sustaining research-based practices in reading. <u>Remedial and Special Education</u>, 20, 263-274.

Latour, B. (1996). <u>Aramis or the Love of Technology</u> (Translated by C. Porter). Cambridge, MA: Harvard University Press.

Law, J (Ed). (1986). Power, Action & Belief. London: Routledge.

Lefebvre, R. C. (1990). Strategies to maintain and institutionalize successful programs: a marketing approach. In N. Bracht (Ed.), <u>Health Promotion at the Community Level</u> (pp. 209-228). Newbury Park, California: Sage.

Lofton, G., Ellett, C., Hill, F., & Chauvin, S. (1998). Five years after implementation: the role of the district in maintaining an ongoing school improvement process. <u>School Effectiveness and School Improvement</u>, 9, 58-69.

Miles, M. B., Eckholm, M., & Vandenburge, R. (Eds.) (1987). Lasting School Improvement: Exploring the Process of Institutionalization. Leuven, Belgium: ACCO.

O'Loughlin, J., Renaud, L., Richard, L., Gomez, L., & Paradis, G. (1998). Correlates of sustainability of community-based heart health promotion interventions. <u>Preventive Medicine</u>, 27, 702-712.

Osganian, S. K., Parcel, G. S., & Stone, E. J. (2003). Institutionalization of a school health promotion program: background and rationale of the CATCH-ON study. <u>Health Education & Behavior, 30</u>, 410-417.

Owen, J. (with Rogers, P.) (1999). <u>Program Evaluation: Forms and Approaches</u>. St Leonards, Australia: Allen & Unwin.

Paine-Andrews, A., Fisher, J. L., Campuzano, M. K., Fawcett, S. B., & Berkley-Patton, J. (2000). Promoting sustainability of community health initiatives: an empirical case study. <u>Health Promotion</u> <u>Practice</u>, <u>1</u>, 248-258.

Parcel, G. S., O'Hara-Tompkins, N. M., Harrist, R. B., Basen-Engquist, K. M., McCormick, L. K., Gottlieb, N. H., & Eriksen, M. P. (1995). Diffusion of an effective tobacco prevention program. Part 11:Evaluation of the adoption phase. <u>Health Education Research</u>, 10, 297-307.

Pentz, M. A. (2000). Institutionalizing community-based prevention through policy change. <u>Journal of</u> <u>Community Psychology, 28</u>, 257-270.

Rogers, E. M. (1995). <u>Diffusion of Innovations</u> (4th ed.). New York: The Free Press.

Rosenberg, M. S., & Jackman, L. A. (2003). Development, implementation, and sustainability of comprehensive school-wide behaviour management systems. <u>Intervention in School and Clinic, 39</u>, 10-21.

Rosenheck, R. (2001). Stages in the implementation of innovative clinical programs in complex organizations. <u>The Journal of Mental and Nervous Diseases</u>, 189, 812-821.

Rotheram-Borus, M. J., Bickford, B., & Milburn, N. G. (2001). Implementing a classroom-based social skills training program in middle childhood. Journal of Educational and Psychological Consultation, <u>12</u>, 91-111.

Scheirer, M. A. (1990). The life cycle of an innovation: adoption versus discontinuation of the Fluoride Mouth Rinse Program in schools. Journal of Health and Social Behaviour, 31, 203-215.

Shediac-Rizkallah, M. C., & Bone, L. R. (1998). Planning for the sustainability of community-based health programs: conceptual frameworks and future directions for research, practice and policy. <u>Health Education Research</u>, 13, 87-108.

Smith, D. W., Steckler, A., McCormick, L., & McLeroy, K. (1995). Lessons learned about disseminating health curricula to schools. Journal of Health Education, 26, 37-43.

Stange, K. C. (1996). One size doesn't fit all: multi-method research yields new insights into interventions to increase prevention in family practice. Journal of Family Practice, 43, 358-360.

Surry, D. W., & Ely, D. P. (2001). Adoption, diffusion, implementation, and institutionalization of educational innovations. In R. Reiser & J. V. Dempsey (Eds.), <u>Trend and Issues in Instructional Design</u> and <u>Technology</u> (pp. 183-193). Upper Saddle River: Prentice Hall.

Yin, R. K., & Quick, S. K. (1979). <u>Changing Urban Bureaucracies: How New Practices become</u> <u>Routinized</u>. Lexington, MA: D. C. Heath.