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Concepts and Practice
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CHAPTER

THE CLARKSON SCHOOL COMMUNITY PROFILING PROJECT

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INTRODUCTION

The concept of resilience has, in the last decade, begun to change the way that we look at the lives of children. When policy discussions emphasise ‘children at-risk,’ the task of removing all of the factors that can create significant stresses for children seems overwhelming. Rather than promoting action, it tends to promote labelling and inaction. In contrast, research and interventions that focus on resilience point to what should be added to children’s lives to give them better tools for coping with diverse, stressful settings. While not ignoring the social circumstances that make modern life more difficult for children, it emphasises more careful efforts to improve the conditions that most directly affect a child’s ability to cope, such as effective parenting and early efforts to increase learning. (Louis 1996)

This chapter outlines the development and implementation of an innovative school community profiling process developed for the primary schools and the senior high school in the Clarkson area of Perth, Western Australia. The profile describes the competencies, risk and protective factors that affect student wellbeing and academic outcomes. This has allowed the schools to better target their efforts in terms of health promotion and the selection of specific prevention strategies. While some of the identified relevant risk and protective factors are solely within the influence of schools, there are others that necessitated the schools forming collaborative partnerships with other
agencies in order to improve outcomes for their students. The chapter discusses the project’s goals, the context in which it arose, its theoretical framework, data collection processes, data analysis and application of results to date.

BACKGROUND

The concept of profiling a local school community came about as a result of the publication of the findings of the Western Australian Child Health Survey (Zubrick et al. 1995; Silburn et al. 1996; Zubrick et al. 1997). It occurred to the associate principal of Clarkson Community High School that the instruments and processes used in the survey could be adapted to provide a comprehensive picture of an individual school community. This newly established school, situated on the periphery of Perth’s rapidly expanding northern suburbs, had a particular need for such information as its foundation Year 8 intake was perceived to have a high proportion of students with behavioural and academic problems. The school leadership team was of the view that many of these problems were associated with the sociocultural and economic diversity of the school’s catchment population. They were keen to gain a better understanding of which factors within students, their families, local community and school environment were associated with educational and behavioural outcomes, and the extent to which these could be modified. Profiling the school community was thus seen as a logical first step to improving the capacity of the school to bring about improvements in students’ academic competence, health and emotional wellbeing.

The need for schools to foster the academic and social development of students had also recently been highlighted in the newly developed K-12 curriculum framework for Western Australia (Curriculum Council WA 1998). The Education Department of Western Australia’s Students at Educational Risk (SAER) Strategy (Education Department of WA 1997) had also recently required all Western Australian public schools to develop the capacity to survey students’ educational needs (Education Department of WA Evaluation Branch 1997). The educational mission of the Clarkson high school has a strong emphasis on pastoral care provided within a health promoting schools framework (National Strategy for Health Promoting Schools in Australia 1998; Hendren, Birrell -Weisen & Orley 1994). Following discussions between the school leadership team, the Institute for Child Health Research and the Education Department of Western Australia, an agreement was reached to conduct a demonstration project. The primary aim has been to develop data infrastructure and resources to support school-based prevention which once refined could be available to other Western Australian schools. Initial funding from the Education
Department of Western Australia’s Students at Educational Risk Strategy enabled the out-posting of an experienced school psychologist to coordinate the piloting and documentation of the school profiling process (Vickers et al. 2000).

SCHOOL COMMUNITY PROFILING—THE THEORETICAL FRAMEWORK

The school community profiling process involves systematic gathering of relevant information through the use of questionnaires completed by teachers, students and their families. It is based on an ecological systems theory of child development where factors within the child and the child’s environment are seen to interact in complex ways that affect the life outcomes in terms of their academic, physical, social and emotional development (see Fig. 11.1). Stressful life events, risk and protective factors within the child and their environment (family, school and community) were identified from the findings of the Western Australian Child Health Survey and other international research as having a bearing on particular student outcomes of interest to the school. By profiling the school community in this way a school can develop the means to monitor the outcomes achieved by its students and identify the relevant risk and protective factors. An understanding and measurement of these parameters can be used to enable the school to better target its efforts in terms of intervention and in the selection of particular prevention strategies.

Figure 11.1 Model underlying the school community profiling process
WHY PROFILE?
The profile is essentially an information system that provides reliable and high quality information to enable a school to:

- accurately describe its clients and school community;
- make a case for additional education funds and services;
- access resources and services from other agencies;
- identify areas for improved school performance;
- identify at-risk students at an early stage;
- evaluate and monitor school policy and programs; and
- better identify factors in the school community that, when targeted for intervention, will bring about the most improvement in student outcomes.

WHAT TO PROFILE?
Schools need reliable and valid information to inform strategic decisions about policy directions and interventions. While a multitude of factors could be profiled, this information should be restricted to only that which is most likely to achieve a result, and a level of data collection which is acceptable to the school community. The following criteria were useful in determining which factors should be profiled and how the data should be collected:

- **Burden:** The profiling process must not place an excessive burden, either in terms of time or intrusiveness, on people being asked for information.
- **Relevance:** Data collected should be relevant to the core business of education and data collection should be guided by evidence of the data’s value for monitoring, planning, evaluating and resourcing programs.
- **Developmental appropriateness:** Information collection should take into account the developmental level of students at each data collection point.
- **Economy:** The most cost-effective and sustainable way to collect data is to embed the process in normal school routines such as enrolment and third-term census activities.
- **Modifiability:** Information on risk factors and protective factors should be restricted to those that are potentially modifiable. Other factors can be included as long as there is evidence that they contribute to planning, evaluating and resourcing programs to address educational risk.
Figure 11.2 provides an overview of the specific domains of information collected by Clarkson Primary School and Table 11.1 provides an overview of the student outcomes and risk and protective factors measured by Clarkson Community High School. The broad range of information covered in the primary and high school profiling questionnaires reflects the exploratory nature of this study and the expectation that the data analysis would identify the specific variables of most direct relevance to the student outcomes of interest. Through such selection of relevant items and the use of analytic techniques to produce valid and reliable short forms of scales, the next stage of the project will achieve significant reduction in the volume of data needed. Until quite recently prevention research has tended to focus mostly on reducing risk factors with a consequent problem-oriented focus. However, the current research emphasis on resiliency and capacity-building is producing a range of new useful measures of wellbeing, competence and capacity and the protective factors and resiliency traits associated with them. As these instruments become

**OUR GOAL: HEALTHY, HAPPY, CAPABLE AND RESILIENT CHILDREN**

*Figure 11.2 An overview of information collected by Clarkson Primary School*
### Table 11.1 An overview of information collected by Clarkson Community High School

#### Student outcomes

<table>
<thead>
<tr>
<th>Learning area outcomes</th>
<th>Self-management skills</th>
<th>Learning skills</th>
<th>Health risk behaviour</th>
</tr>
</thead>
<tbody>
<tr>
<td>• English</td>
<td>• Personal organisational skills</td>
<td>• Collecting and organising information</td>
<td>• Low levels of aerobic exercise</td>
</tr>
<tr>
<td>• Mathematics</td>
<td>• Self-motivated</td>
<td>• Communicating ideas and information</td>
<td>• Smoking</td>
</tr>
<tr>
<td>• Science</td>
<td>• Interprets and follows instructions</td>
<td>• Solving problems</td>
<td>• Alcohol use</td>
</tr>
<tr>
<td>• Languages other than English</td>
<td>• Cooperates with others</td>
<td>• Using technology</td>
<td>• Substance use control problems</td>
</tr>
<tr>
<td>• Society &amp; Environment</td>
<td>• Works independently</td>
<td></td>
<td>• Suicidal thoughts</td>
</tr>
<tr>
<td>• Health &amp; Physical Education</td>
<td>• Accepts responsibility</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Vocational &amp; Practical Arts</td>
<td>• Presents work neatly/appropriately</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Technology &amp; Enterprise</td>
<td>• Interacts effectively/appropriately</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Completes homework</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Behaves appropriately</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Risk and protective factors

#### Within child factors

- Ability levels (SPM)
- Speech and language ability
- Self-esteem
- Self-efficacy
- Locus of control
- Anger control problems
- Coping/problem solving
- Personal confidante
- Perceived stress
- School and post-school goals
- Feelings about school
- Feelings of alienation from school
- Absences from school
- Homework approach

#### Family factors

- Family structure
- Family Income
- Family mobility
- Language spoken at home
- Parenting style
- Family strain
- Family functioning
- Stressful family life events
- Homework provision/support
- Supervision of children
- Satisfaction with community resources and services

#### Parent factors

- Date of birth
- Gender
- Country of origin
- Employment
- Work arrangements
- Job complexity
- Hours worked
- Satisfaction with work situation
- Qualification and educational levels
- Goal for children's education
- Confidence in assisting children
- General health
- Personal confidante
- Confidence in assisting children

#### Social support

- Satisfaction with family support
- Community connectedness
- Social support
- Activities of friends (pro-social)
- Number of friends and importance
more readily available for use in school-based settings there is likely to be significant refinement of the information which needs to be collected and the methods and technologies for their collection and analysis.

TO PROFILE OR NOT PROFILE?
Schools considering the development of a profiling process need to consider the extent to which the school's mission and ethos can support the following key elements:

- an approach to learning and school organisation that is driven by the needs of students;
- an holistic view of the needs of children where their cognitive, social and emotional needs impacting on learning is taken into account;
- a commitment to self-reflection and continuous improvement;
- the capacity to change as a result of the information collected.

The capacity to change includes willingness and resources, and a reasonably well-established positive relationship with parents. Not having these elements in place would not preclude a school from profiling, providing there was a genuine commitment to work towards them, and an appreciation of the value of including them in the school's development planning processes.

**SHOULD YOUR SCHOOL CONSIDER PROFILING?**
1. Are you clear about what profiling is and what is involved?
2. Are you clear about the reasons for profiling?
3. Is there a key leadership group within the school that has an understanding of the profiling process and the benefits to the school? If not, how will you achieve this?
4. Who will manage the implementation of the profiling process?
5. Do you have the support of your school community (parents, staff and students) to profile? How will you gain this support?
6. Do you have the resources and expertise to profile?
7. Do you have realistic expectations about the profiling process in terms of the tasks and time required?
8. Do you have the capacity to change as a result of the information collected?
IMPLEMENTING THE PROFILING PROCESS
Implementing the profiling process required careful attention to the following implementation steps.

Step 1 Establishing project management arrangements
School leadership team
The profiling process was built into existing management structures in the school through the establishment of regular meetings of the school leadership team (the principal and two associate principals) with the project officer and researchers from the Institute for Child Health Research. These meetings also periodically included representatives of the regional education office and the central office student services group. This team reached a good level of agreement with regard to the project objectives and the strategic steps needed for their achievement. This involved examining and articulating the team's beliefs about the conditions under which children are most likely to thrive and achieve.

School management team
As the project moved into the implementation phase a school management team was established. In the primary school, this consisted of the principal, a deputy principal, the schools' student services manager, the school psychologist and the project coordinator. The goals of the team were to refine the data collection instruments and processes so that they became embedded in normal school routines and resources and to ensure that staff had the necessary understanding and expertise to carry out the processes on their own. The management team met regularly throughout the year to plan a process, key tasks and time line for implementation. It met with administrative support officers and groups of teachers and parents for consultation as needed, and was able to gain the support of the whole staff to successfully implement the process. Critical to this support was developing a shared understanding of how the school community profiling could assist the Clarkson community (the reality rather than the myth). The management team found it useful to identify all the tasks likely to be required in implementing the profiling process, to prioritise and sequence the tasks with anticipated time lines. Adhering to the planned steps and time lines prevented the management team from becoming stuck in the discussion of issues not relevant to the project.

Step 2 Gaining the support of the school community
Health promotion literature stresses the importance of the active involvement of local communities for there to be an impetus for action. Gaining the understanding, support and commitment of members of the school community
required identifying the key stakeholders and planning how to approach and involve them with the profiling process. Any approach to stakeholders must be with respect, openness, a genuine interest in their views, and a belief that the process does not go ahead without their understanding and support. The time spent in consultation at this stage of the project ensured that sufficient numbers of parents and staff understood and supported the concept of school community profiling and its potential benefits. The more comfortable parents feel about the process, the more willing they are likely to be to provide personal information about their families.

**Learning community coordinators**
The school leadership team discussed the project concept with learning community coordinators at regular school management meetings. Coordinators were highly supportive and preferred to be kept informed about progress rather than asked to play a central role in project administration.

**Teaching and administration staff**
At a special staff meeting the principal introduced the project by reiterating the school’s goals and emphasised that a key component of the school’s philosophy acknowledged the impact of all aspects of students’ lives on their learning and development. Background information about the resiliency model underlying the Western Australian Child Health Survey was presented, along with evidence of the effectiveness of school-based prevention. The specific tasks that would be involved and what they would mean in terms of staff time and effort were outlined. While teaching staff had some concerns that their involvement in the profiling process would not assist them in the short term, they could nevertheless see long-term benefits, voted to proceed and offered several practical suggestion. Apart from this initial meeting the teaching staff asked that their input be kept to a minimum (e.g. to be periodically briefed on the project’s progress at lunchtime staff meetings).

**Parents**
The principal presented the proposal to parents through a Parents and Citizens meeting and a School Decision-Making Group meeting. Both groups strongly supported the proposal. A randomly selected group of 20 parents was brought together in a focus group at the school to consider the proposal and to give feedback about draft survey instruments and the proposed data collection process. These parents were invited through personal phone calls, and were sent information in advance if they agreed to participate. These parents clearly understood and supported the intent of the profiling process and were comfortable with most of the items included in the draft survey forms. Some concerns were raised about the intrusiveness of some items on the parent
survey forms (e.g. family income, discipline approaches and stressful life events). However, they indicated that if proper explanations were provided as to why these questions needed to be asked they felt that most parents were likely to cooperate.

**Students**
An information sheet was available for form teachers to use as a guide in informing students about the project. This was done a week before students were asked to complete the youth survey questionnaire. The purpose of the survey, the types of questions to be asked, and the voluntary and confidential nature of the survey were discussed, along with any concerns raised.

**District Education Office staff**
The district superintendent and District Education Office staff were key stakeholders who also needed to be regularly briefed to ensure ongoing support and to assist in overcoming staffing and other issues which could arise.

**Contributory primary schools**
During the pilot phase, the project coordinator individually contacted other local primary school principals to explain the concept of school community profiling and to gain approval to approach Year 7 teachers with a request for assistance. The project coordinator and associate principals then visited Year 7 teachers to explain the concept of profiling and to asked their assistance in completing a Child Behaviour Checklist on each of their students intending attending Clarkson Community High School the following year. They were offered teacher relief or contract payment at an hourly rate of $25.

**Other community agencies**
The principal and associate principals developed close relationships with field staff from other agencies in order to access support services for individual students and their families. Doing this kept the staff from other agencies informed about the profiling process and ensured their interest when the findings became available. This information was used strategically in bringing the managers of local agencies together at the school to consider joint priorities for action and early interventions at the local school-community level.

**Step 3 Data collection**
**When to collect information**
Data collection was found to be most efficient when embedded into normal school processes and routines. In the high school, natural collection points were the beginning of Year 8 and the end of Year 10. In the primary school natural collection points were at pre-primary, the end of Year 3 and at the end
of Year 7. The increase in efficiency between the pilot and implementation phases of the project, when the collection of information was built into the enrolment process, improved return rates of survey forms from parents by approximately 40% (from 47% to 86%). In contrast, for the primary school, embedding data collection into the end of Semester 1 census activities helped achieve a return rate of 76% from parents (80% from parents of pre-primary children and 69% from parents of Year 3 children).

From whom to collect information?
Three possible options were considered which each involved voluntary participation and assurances that the data would be held securely, in strict confidence and not be released to any other person without the signed consent of the participants (Table 11.2).

Selection of survey questions and instruments
Wherever possible the selection of instruments, scales and questions drew on existing measures with previously researched reliability and validity characteristics. Some items were modified with permission for local conditions and some items were specifically designed for the project schools. Mental health measures drew on those used in the Western Australian Child Health Survey and other scales identified by recent research. The Curtin University of Technology Department of Speech and Hearing Sciences assisted in identifying suitable scales to assess children's speech and language development. Speech pathology students conducted full speech and language assessments on students whose parents gave permission, to enable reliability and validity checks on both the teacher and parent versions of the recommended scales. Similar assistance was provided by the Health Department of Western Australia to validate a set of questions about children's eating habits.

Linkage with other student data
Existing school information about students (such as academic results, attendance, behaviour records and demographic family data) was also linked with the school community profile database. In the primary school academic data included Literacy Net results, end of year teacher assessments and school attendance records.

Methods of information collection
The initial stage of this project simply used pencil and paper questionnaires. In the longer term, data collection will be computerised and the feasibility of developing the school's intranet for student data collection is being investigated. The use of CD-ROM and web browser technology to produce 'child-friendly' and visually and auditorily engaging computer-administered questionnaires is also being explored. This could enable the production of PC-
### Table 11.2 Sampling and data collection options

<table>
<thead>
<tr>
<th>Options</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
</table>
| 1. Collect information from an unidentified random sample of students, their teachers and their parents. | • Anonymity  
• Better participation likely  
• Smaller numbers for data management | • Precludes linkages to other data sources such as academic results  
• Unable to identify high-risk students or groups who could benefit from preventive interventions.  
• Smaller numbers restrict power and utility of the data.  
• Lack of anonymity may bias some responses.  
• Unable to identify high-risk students or groups who could benefit from preventive interventions.  
• Smaller numbers restrict power and utility of the data.  
• Lack of anonymity may bias some responses.  
• Costs associated with larger volume of data to be handled. |
| 2. Collect information from a random sample of identified students, their teachers and their parents. | • Linkage to other student data is possible. | |
| 3. Collect identified information from all students in particular year groups, from their families and teachers (e.g. all Year 8 or Year 10 students). | • Greater power to detect key prevalences, risk and protective factors.  
• Able to identify students or groups for specific interventions and evaluation purposes.  
• Enables linkage to other student data sources. | |

Based systems for direct data entry with in-built validity checks. Such technologies can also assist poor readers to activate questions being 'read aloud'. Discussions have also been held with the Western Australian Education Department concerning the future linkage of student profiling tools with planned system-wide student information systems.

### Step 4 Data entry and analysis

To date, all data have been entered manually into an SPSS database by an experienced data entry clerk at a rate of $20–$22/hour. The overall data entry cost for all questionnaires for each student and their family was $3.12. All data was analysed using SPSS-PC. After the initial exploratory analysis, command syntax was written to permit school and student services staff with limited statistical or computing knowledge to produce summary descriptive statistics.
(frequencies, means, modes, medians, range and standard deviations; chi-square tables, and t-tests, tables and graphs). More sophisticated multivariate techniques of analysis were carried out by the project officer and researchers at the Institute for Child Health Research.

**Step 5 Results**
The school community profile and its coverage of the information domains critical for planning, monitoring and programming was the first major outcome of the project. This contains four types of information:

1. **Student group profiles.** These are aggregations of individual student information at levels useful for describing groups of students at increased risk. Along with a learning area profile these data typically describe risk and protective factors that include speech and language, self-esteem and efficacy, coping strategies, substance use, health-risk behaviours, levels of exercise, feelings about school, homework and the community, peer activities and social supports. A student group profile is a mental health profile based on the parent and teacher versions of the CBCL.

2. **Family and community profiles.** These contain family and/or community-based descriptors. These descriptors include family type, parental education and work levels, levels of income, and educational expectations that the parents may have for their children.

3. **School environment profiles.** These describe parent, teacher and student perceptions of the school environment. These descriptors include ratings of the effectiveness of the school and classroom environment, quality of teaching practices, relevance and appropriateness of the curriculum, effectiveness of the work environment, relationships between staff, students and parents, and the occurrence of problem behaviours.

4. **Individual student profiles.** Summary profiles on individual students bring together information about their academic competence, behavioural and emotional functioning, and major risk and protective factors such as speech and language status, goal and homework orientation, coping and problem-solving capacity, self-esteem and self-efficacy. They also contain information about family risk factors such as financial strain, family structure, parental discipline style, family discord and other family stress, and perceived levels of family support. The student profile forms part of the student’s confidential file. The parental consent arrangements specified that only the principal or associate principals could access this information.
Step 6 Interpreting the results

Presenting the findings to stakeholder groups

Key stakeholders have a right to participate in the analysis of results, setting priorities for improvement and in planning interventions. Their active participation clearly increases the likelihood of interventions being culturally appropriate and successfully implemented. This required the presentation of findings in a form suitable to the interest level and technical knowledge of each of the various stakeholder groups. Care was also taken to ensure the presentation of the findings in non-judgmental ways and in a manner that facilitated the building of positive relationships. Key findings were presented in simple table or graphical form, showing comparisons to population level statistics such as the findings from the Western Australian Child Health Survey or other normative data. This assisted stakeholders in making judgments about the strengths and problems of the community and their relative severity. The inclusion of key people or organisations at this early stage was strategically useful in advancing the planning, resourcing or implementation of subsequent intervention strategies. These included local members of parliament, the local Town Council, family and children's services, and the community health, police, juvenile justice and mental health services.

Identifying student outcomes in need of improvement

The data gathered through the school community profiling process have now become part of the school's management information system and as such are now used by decision-making groups to determine priority areas for school improvement. Outcomes for improvement are identified and prioritised according to their prevalence, severity, and the likely benefit of appropriately targeted prevention.

Identifying significant risk factor

At this stage most work has been done on analysing risk and protective factors associated with mental health problems. Twenty-two per cent of Year 8 students were identified as having a mental health problem. Of all the risk factors measured, those that best identify the children with mental health problems are given in Table 11.3. Logistic regression analysis produced a model which predicted mental health problems with 86% accuracy ($X^2 = 71.7, \ p < 0.001$). In Table 11.3 it can be seen that there were 46 children (29%) whose parents use coercive or inconsistent discipline and that these children were 5.5 times more likely to have a mental health problem than children whose parents use more encouraging parenting styles. The amount of risk coercive parenting style attributes to mental health problems is 45%. This means, theoretically at least, if we implement an intervention to change parenting styles which is 100%
Table 11.3 Attributable risks for mental health problems for Year 8 students

<table>
<thead>
<tr>
<th>Risk factor</th>
<th>% of children</th>
<th>Number of children</th>
<th>Adjusted odds ratios</th>
<th>Attributable risk %</th>
<th>Number of cases theoretically preventable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents use coercive or inconsistent discipline.</td>
<td>29</td>
<td>46</td>
<td>5.5</td>
<td>45</td>
<td>24</td>
</tr>
<tr>
<td>Parents feel need for outside help with discipline.</td>
<td>8</td>
<td>15</td>
<td>12.5</td>
<td>21</td>
<td>11</td>
</tr>
<tr>
<td>Child does not feel connected to others.</td>
<td>29</td>
<td>59</td>
<td>4.7</td>
<td>45</td>
<td>24</td>
</tr>
<tr>
<td>Child feels under considerable stress/strain.</td>
<td>24</td>
<td>37</td>
<td>3.7</td>
<td>37</td>
<td>220</td>
</tr>
<tr>
<td>Child is dissatisfied with weight.</td>
<td>16</td>
<td>26</td>
<td>3.7</td>
<td>20</td>
<td>11</td>
</tr>
<tr>
<td>Child has episodes of binge drinking.</td>
<td>6</td>
<td>13</td>
<td>11.2</td>
<td>105</td>
<td></td>
</tr>
</tbody>
</table>

Effective, we could potentially prevent 45% of the cases of mental health problems, i.e. 45% of 54 cases = 24 cases.

The calculation of odd ratios takes into account the overlap amongst factors, so it is acceptable to multiply odd ratios together to calculate the total risk for the co-occurrence of risk. For example, if a student has parents who use a coercive parenting style, does not feel connected to others and feels under great strain, then that child will be 95.6 (i.e. 5.5 x 4.7 x 3.7) times more likely to have a mental health problem. We also know from our analysis that 43% of our students exercise strenuously four or more times a week, 26.5% only once a week or not at all and 12% of them eat a high fat/refined sugar diet. It could well be that many of these students are in fact overweight. Unfortunately, we found students’ reporting of their own weight and height unreliable, so the calculation of body mass index has not been possible.

Identifying key protective factors
The main factors associated with reduced likelihood of mental health problems were positive self-esteem, having a personal confidante with whom one can share problems, having a sense of family connectedness, feeling accepted by peers and teachers, and having high achievement aspirations. The respective unadjusted odds ratios associated with these risk factors were 0.33, 0.38, 0.36, 0.29 and 0.42. The most notable factors associated with a reduced likelihood
of academic problems were high self-efficacy and a sense of school and community connectedness. Here the unadjusted odds ratios were 0.40 and 0.41 respectively.

HOW THE FINDINGS HAVE BEEN APPLIED
During the implementation of this project, the Clarkson Community High School also participated in the pilot of the MindMatters mental health promoting schools program. Information from the school-community profiling process was used in conjunction with the MindMatters school development resources to promote the development of positive relationships as a central objective. Teaching and learning strategies using collaborative problem solving are strongly promoted and a range of life-skills training initiatives has been instituted through the curriculum.

During 2001 a series of planning workshops was facilitated with the school staff and representatives of community stakeholders and agencies. This enlisted their active involvement in agreeing upon the school and community’s priority goals for prevention. The initial priorities were:

- reducing adverse parenting;
- reducing the high local rates of early onset substance use;
- improving students’ diet and nutrition;
- increasing students’ levels of regular exercise.

The school has since collaborated with the local health and family and children’s services to conduct evening parenting programs at the school for all Year 8 parents. The specialist physical education staff worked with the school leadership team, local government and sporting associations to develop a plan to raise the physical activity levels of students and the availability of organised activities in out-of-school hours. This resulted in the establishment of a Friday afternoon soccer tournament which has become a popular community event involving students and parents. The concerns about substance use have been taken up with the local drug action group and plans are currently underway to implement the PACE (‘Parenting Adolescents: A Creative Experience’) program.

Despite these initial successes, the systematic implementation and support of prevention on an ongoing basis has been a significant demand on the time and energy of key staff. To overcome this the school has recently collaborated with a range of other local stakeholders (including the local council, police and the community shopping centre) to secure external grant funding for 3 years to employ a full-time prevention and community liaison officer. This person will be responsible for supporting the school leadership team and teaching staff in its ongoing implementation of school-based prevention.
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