Service and Program Awards Application Cover Sheet

Category: Mental Health Promotion or Mental Illness Prevention

Entry Title: Climate Schools: Internet-based health and wellbeing programs for secondary school students

Name of Applicant: Lauren Gardner on behalf of the Climate Schools Team: Nicola Newton, Lauren Gardner, Katrina Champion, Scarlett Smout, Tim Slade, Cath Chapman, Lyra Egan & Maree Teesson.

Organisation: The Matilda Centre for Research in Mental Health and Substance Use
Substance use, anxiety, and depression are the leading causes of disability among young people in high income countries, such as Australia (1). These conditions commonly co-occur and typically have an onset during adolescence, with the greatest disability among those aged 15-24 years (2, 3). To reduce the substantial social and economic burden of these conditions and improve the trajectories of young people, timely and effective prevention is critical. To address this need, our team have developed, rigorously evaluated, and translated a suite of innovative internet-based programs for secondary school students.

**Climate Schools** ([https://www.climateschools.com.au/](https://www.climateschools.com.au/)) is a universal prevention model that utilises interactive cartoon storyboards to engage and educate students, thereby empowering them to improve their health and wellbeing. There are currently 5 evidence-based modules available, including: Mental Health (Years 8, 9 & 10); Alcohol (Year 8); Alcohol & Cannabis (Years 8 & 9); Cannabis & Psychostimulants (Years 9, 10 & 11); and Ecstasy & Emerging Drugs (Years 10 & 11). Co-designed with young people and health and education experts, each module includes 4-6 lessons, supported by optional teacher-facilitated class activities. The lessons are grounded in the Social Influence Theory, providing developmentally appropriate and balanced information about substance use and mental health, resistance skills training, and normative education. The lessons are mapped to the health education curriculum and require no formal teacher training.

The programs have been rigorously evaluated in 8 large randomised controlled trials (6 complete, 2 ongoing, including 240 schools, >21,000 students) in Australia and a pilot trial in the UK. Compared to health education as usual, student who received the Climate Schools programs showed reduced psychological distress, slowed progression of anxiety symptoms, reduced alcohol consumption and binge drinking, reduced cannabis and ecstasy use, reduced harms from substance use, and improved knowledge about mental health and alcohol and other drugs for up to 3 years following the interventions. Moreover, the programs have been well received by consumers with 93% of students finding the cartoons an enjoyable and interesting way to learn, and 95% of teachers rating the education quality of the programs highly.

Climate Schools is publicly available for use in Australia and has reached >1,030 schools/organisations (>28,000 students, >2,400 teachers) and health services, with 23,085 unique users, 48,238 sessions and 244,532 pageviews in the past year alone. In recognition of the challenges schools have faced during the COVID-19 pandemic, the programs have been made available free-of-charge. This offer has been taken up by >500 schools across all states and territories. The Climate Schools trials have been cited in a number of influential reviews and meta-analyses examining the effectiveness of drug prevention, with one independent review finding Climate Schools to be one of only three alcohol education programs having good evidence of effect.

Climate Schools has also made substantial international impact. For example, adapted versions of the materials are publicly available in the US and the UK, and recently, partnerships have been established with research teams in Hong Kong, Zimbabwe and Ireland to localise and evaluate the materials in their contexts.
Address the following Criteria (max. 10 X A4 pages).

1. Evidence of a significant contribution to the field of mental health on a local, state, or national level.

*Climate Schools* has made an outstanding contribution to the field of mental health by demonstrating that universal internet-based programs can be effective in preventing mental ill-health, substance use and related harms among adolescents. Following rigorous evaluation in 8 large randomised controlled trials (6 complete, 2 ongoing, including 240 schools, >21,000 students) and established evidence of effectiveness in improving knowledge, behaviours and wellbeing, the programs are now publicly available to schools, organisations, and research institutions in Australia, with adapted versions of the site available in the US and the UK. Overall, *Climate Schools* has reached more than 1030 schools and health services across all states and territories of Australia (>28,000 students and >2,400 teachers), with an additional 94 international organisations (203 students and 113 teachers).

*Climate Schools* has made a particularly significant contribution to the field of mental health on a national level in response to the COVID-19 pandemic. In recognition of the challenges schools have faced with the sudden shift to “learning from home” and adjusting to social distancing and intermittent lockdowns, the programs are being offered free-of-charge to all Australian schools. As the resources are accessed electronically, students, teachers and parents have been able to access high-quality, evidence-based education about mental health and substance use, whether based at school or at home. A total of 511 organisations (8,089 students, 915 teachers) have registered for the offer, including schools across every state and territory of Australia (see Figure for more detail).
In another show of support during the pandemic, *Climate Schools* collaborated with
the largest provider of online learning for school-aged students in Australia –
Education Perfect – to provide a free mental health lesson based on the *Climate
Schools* Mental Health module and co-produced an article that provided practical tips
for looking after mental health during uncertain times. The team provided two versions
of the program – one localised for Australia and one for New Zealand – and they were
disseminated to 3,000 Education Perfect member schools. Out of all free programs on
Education Perfect, *Climate Schools* was rated the highest quality in New Zealand and
second highest in Australia by students and teachers.

Finally, *Climate Schools* has made a substantial contribution to the field by
disseminating research findings in leading academic journals (e.g., The Lancet
Digital Health; Addiction - ranked 2/36 Substance Abuse; and, Psychological
Medicine - ranked 13/142 Psychiatry) and at national and international conferences.
This includes 43 peer-reviewed journal articles and eight book chapters on the
development and effectiveness of the programs and presentations at >150
conferences. The publications have received 1351 citations (Google scholar) by
researchers in 49 countries (e.g., US, Germany, Brazil) and from 22 disciplines (e.g.,
Medicine, Neuroscience & Computer Science).

2. Evidence of innovation and/or recognised best practice.

*Climate Schools* has generated crucial new knowledge by showing for the first time
that universal internet-based programs can address substance use and mental health
among youth. Built on decades of research aiming to better understand what makes
an effective school-based prevention program, the team developed and evaluated an
innovative prevention model that:

- *adheres to the evidence-base* (e.g., by adopting a harm minimisation approach
  and being underpinned by the Social Influence Theory)
- *overcomes key barriers to implementation to increase fidelity* (e.g., the lessons
  require no formal teacher training and are aligned with the health education
  curriculum, meaning teachers do not need to adapt them and risk losing the
  critical components)
- *improves student engagement* (e.g., by utilising interactive cartoons with
  engaging storylines and characters around the same age as the target students
  to deliver peer-led education).

This influential program of research has revolutionised understanding of what is
effective for school-based prevention education, informing national and international
policy and practice. For example, in 2013, the Alcohol & Cannabis module was
reviewed by, and included on, the prestigious US National Register of Evidence-based
Programs and Practices. In 2014, it was included in the National Centre for Education
and Training on Addiction (NCETA) “Alcohol Education: What really works in Schools”
policy document for schools where it was given three stars for effectiveness - the
highest rating. The research informed the 2015 & 2018 International Standards for
Drug Use Prevention by the United Nations Office of Drugs and Crime, and the 2017
Good Policy and Practice in Health Education report by the United Nations and World
Health Organisation. *Climate Schools* has also been used as evidence in multiple
global reports (e.g. UK NICE evidence review 2019, UN World Drug Report 2015) and cited in a number of influential reviews and meta-analyses (4-6) examining the effectiveness of substance use prevention. Notably, Lee et al’s (5) independent review indicated that Climate Schools was one of only three alcohol education programs rated as having good evidence of effect. Finally, the team has further influenced health and education policy through an invited expert consultation report for the Queensland Mental Health Commission on best practice in AOD Prevention in 2020, and participation in the National Health & Physical Education Curriculum Review in 2021.

The innovation and impact of Climate Schools is further evidenced through funding and awards. For example, the Climate Schools team have attracted 20 grants, fellowships and scholarships totalling $22.6M since 2004, and have won >30 awards, including the Australian Drug Foundation Innovation in Prevention and Education Award and the Australian Rotary Health Knowledge Dissemination Award at the 2014 Society of Mental Health Research conference.

3. Evidence of participation of mental health consumers in the planning, implementation, and evaluation of mental health service delivery. Evidence of prioritising increased level of engagement and influence of consumers and where higher-level participation such as authentic co-design is highly favoured.

The Climate Schools programs have been co-designed with >160 young people and >380 teachers, parents, and health and education experts (e.g., the Department of Health, the NSW Department of Education, and the Association of Independent Schools NSW) (7-13). For example, when developing the Mental Health module, 88 students were asked about whether the cartoon format would appeal to adolescents, if the content was relevant and if they had suggestions for making the program more appealing (7). Feedback was also sought from 27 school staff about whether the program could be implemented and if there were ways to make the program more effective and efficient, and seven mental health experts were asked to evaluate the content and delivery. The program was refined in light of comments from these three groups. Moreover, focus groups were conducted with approximately 30 students from two independent schools in Sydney when revising the Mental Health module (14). An experienced clinical psychologist amended the script of the online cartoon component, and illustrations were updated to reflect current youth trends and to maintain consistency with the other Climate Schools modules. Insight from focus groups ensured that the modifications accurately reflected realistic scenarios and language of Year 9 students.

Recently, young people, mental health experts and education stakeholders were engaged to review the materials ahead of an upcoming rebrand from Climate Schools to OurFutures. Several significant updates have been made to broaden the inclusivity of the programs and ensure they are relevant, engaging and based on the best available evidence. Specifically, this involved:
1. Engaging a clinical psychologist to review the mental health concepts taught in the lessons, adapt language and create activities based on the most recent evidence in the field.

2. Seeking input from eight young people and representatives from the NSW Association of Independent Schools, the NSW Department of Education, Paul Ramsay Foundation and the Department of Health to select the new OurFutures name and branding.

3. Conducting a survey with 110 school staff Australia-wide to determine an accessible price point for the programs and understand barriers that prevent teachers from utilising evidence-based mental health and substance use prevention programs.

4. Analysing evaluation data from the research trials to incorporate feedback into the new cartoons and lesson materials (changes included everything from significantly shortening the length of some lessons to removing male characters’ overuse of “mate”).

5. Utilising insights from the Climate Schools Plus focus groups (45 students aged 13 to 15) to pull together new character “backstories” to make the characters more relatable and the stories more inclusive.

6. Surveying the PREMISE Youth Advisory Board and young people in our networks to gather feedback on the new backstories and modern language used. We incorporated all feedback from adding more male-female friendships to swapping a “dance party” to a “rave”.

7. Conducting informal Instagram research to identify a range of young people in our target demographic and reference their clothing to modernise clothing in the cartoons.

8. Engaging thirteen young people to cast teenage voice actors to improve accessibility for lower literacy and vision impaired students. Before securing the voice talent, sound bites were reviewed by young people to ensure they sounded realistic and relatable for their chosen characters.

4. Evidence of partnerships and linkages with all key stakeholders (collaboration for continuity between organisations).

Schools and Organisations
A growing list of schools and organisations are registered for Climate Schools. This includes Government, Independent and Catholic Schools from all states and territories in Australia, organisations such as local drug action teams (LDATs) who support schools in their area to use the programs, and national and international research institutes (see the figure below for more details).
Health & Educational Partners

*Climate Schools* has strong relationships with key health and educational groups, including the NSW Association of Independent Schools, the NSW and SA Departments of Education, and the Department of Health. These groups have promoted the programs and provided insightful feedback on materials to ensure they suit the needs of teachers and students. For example, when introducing free access to the programs in response to the COVID-19 pandemic, the NSW Association of Independent Schools along with the NSW and SA Departments of Education informed teachers in their catchments and promoted the offer within their networks. The NSW Association of Independent Schools also engaged members of the Climate Schools team to record a webinar about how to maintain wellbeing during COVID-19 that was distributed to all 497 member schools (>18,000 teachers).

International Partnerships

*Climate Schools* is achieving international translation through partnerships with research teams and organisations in Hong Kong (KELY Support Group and the Chinese University of Hong Kong), Zimbabwe (Africa University) and Ireland (Letterkenny Institute of Technology) to localise and evaluate the materials in their contexts. Similar discussions have also commenced with organisations in Chile, Canada, New Zealand, and Italy.

Endorsements

*Climate Schools* is listed on a range of national and international resource directories and websites and is affiliated with several organisations (refer to Table 1: Endorsements and Affiliated Networks).
<table>
<thead>
<tr>
<th>Endorsements and affiliations of <strong>Climate Schools</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NATIONAL DRUG AND ALCOHOL RESEARCH CENTRE, UNSW (NDARC)</strong></td>
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<tr>
<td>AUSTRALIAN GOVERNMENT DEPARTMENT OF HEALTH</td>
</tr>
<tr>
<td><strong>ALCOHOL AND DRUG FOUNDATION</strong></td>
</tr>
<tr>
<td>NSW DEPARTMENT OF EDUCATION</td>
</tr>
<tr>
<td>ASSOCIATION OF INDEPENDENT SCHOOLS OF NSW (AISNSW)</td>
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<tr>
<td>AUSTRALIAN RESEARCH ALLIANCE FOR CHILDREN AND YOUTH (ARACY)</td>
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<tr>
<td>GOVERNMENT OF SOUTH AUSTRALIA DEPARTMENT FOR EDUCATION</td>
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<tr>
<td>PREMISE</td>
</tr>
<tr>
<td>STUDENT WELLBEING HUB</td>
</tr>
<tr>
<td>THE NATIONAL CENTRE FOR EDUCATION AND TRAINING ON ADDICTION (NCETA)</td>
</tr>
<tr>
<td>NATIONAL REGISTRY OF EVIDENCE-BASED PROGRAMS AND PRACTICES (NREPP)</td>
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<tr>
<td>BE YOU (BEYOND BLUE)</td>
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<tr>
<td>COMMUNITIES THAT CARE</td>
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<tr>
<td>CENTER FOR TECHNOLOGY AND BEHAVIORAL HEALTH</td>
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<tr>
<td>CRACKS IN THE ICE</td>
</tr>
<tr>
<td>DOVETAIL</td>
</tr>
<tr>
<td>EDUCATION PERFECT</td>
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<tr>
<td>POSITIVE CHOICES</td>
</tr>
<tr>
<td>ORYGEN</td>
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<tr>
<td>INTERNATIONAL ALLIANCE FOR RESPONSIBLE DRINKING (IARD)</td>
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<tr>
<td>ALCOHOL AWARENESS, NORDIC ALCOHOL AND DRUG POLICY NETWORK</td>
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Digital Partnerships

*Climate Schools* has worked closely with Sydney-based digital agency [Netfront](#) since 2010 to design and deliver the programs to the public. Thanks to Netfront’s expertise in graphic design, web design and web development, *Climate Schools* are available on an accessible and compatible website that has optimal performance, ensuring end-users are able to use the programs without issue on mobile, tablet or desktop devices. This partnership is ongoing as the site continues to be updated and improved, and Netfront are assisting us with the refresh and rebranding of materials under the new name *OurFutures*. Critical to the success of this partnership is a shared understanding of the impact of mental ill-health and substance use among youth and the need to communicate that through the accessible and inclusive website design (e.g., offering multilingual translation of the website).

### 5. Verification and evaluation of effectiveness

**The Evidence-Base**

*Climate Schools* has an exceptionally strong evidence-base which has resulted in 43 peer-reviewed publications in leading mental health and substance use journals. Key outcomes from the randomised controlled trials are summarised in Table 2.

<table>
<thead>
<tr>
<th>Source</th>
<th>Module</th>
<th>Outcomes: compared to health education delivered-as-usual</th>
</tr>
</thead>
</table>
✓ Increased alcohol knowledge  
✓ Decreased average consumption of alcohol  
✓ Decreased binge drinking  
✓ Decreased alcohol-related harms  
✓ Decreased positive alcohol-related expectancies  
✓ Positive teacher & student evaluations |
✓ Increased alcohol and cannabis knowledge  
✓ Decreased frequency of cannabis use  
✓ Decreased average alcohol consumption  
✓ Decreased binge drinking  
✓ Reduced truancy, psychological distress & moral disengagement  
✓ Positive teacher & student evaluations |
| Vogl et al (2014)(21) | Psychostimulant & Cannabis | Up to 10-months post intervention |
Incrase cannabis & psychostimulant knowledge
Reduced positive attitudes towards psychostimulants
Decreased intentions to use psychostimulants & ecstasy in the future
Decreased recent use of ecstasy
Positive teacher & student evaluations

Increased knowledge about ecstasy & New Psychoactive Substances (NPS)
Reduced intentions to use synthetic cannabis and any NPS
Positive teacher & student evaluations

Van Vliet & Andrews (2009)(7) Mental Health and Stress Up to 3-months post intervention
Increased knowledge about stress and coping
Increased use of support-seeking coping behaviours
Decreased avoidant coping behaviours
Decreased psychological distress
Increased life satisfaction

Newton et al. (2020)(24) Mental Health, Alcohol and Alcohol & Cannabis Up to 30 months post intervention
Increased knowledge about mental health and substance use
Smaller increases in odds of drinking and heavy drinking
Slowed down the trajectory of anxiety symptoms

Student & Teacher feedback
Students and teachers have rated the programs positively:
- 93% of students found the cartoon stories an enjoyable and interesting way to learn
- 93% of students thought the information in the program was easy to understand, to learn and to remember
- 95% of teachers rated the educational quality of the program highly
- 88% of teachers rated the program as better than other drug and alcohol education programs
Climate Schools reach
The Australian website has reached >1030 schools and health services across Australia (>28,000 students and >2,400 teachers), with 23,085 unique users, 48,238 sessions and 244,532 pageviews in the past year.

References
Conclusion (1/2 x A4 page).

*Climate Schools* is a suite of innovative, co-designed programs with strong evidence of effectiveness at preventing mental ill-health, substance use and related harms among secondary school students. The extensive body of research conducted to develop and evaluate the programs has revolutionised understanding of what is effective for school-based prevention education, shaping policy and practice both nationally and internationally and resulting in endorsements from a wide range of organisations. Of particular significance is *Climate Schools’* impact on the field of mental health during the COVID-19 pandemic. In addition to schools being provided high quality, evidence-based educational materials that could be readily accessed during school- or home-based learning via the original website, an adapted version of the Mental Health module was created and made available free-of-charge via the largest provider of online learning for school-aged students in Australia and New Zealand – Education Perfect. The value of this innovative prevention model is further evidenced by several prominent awards, substantial research funding, and collaborations with international research institutions (Hong Kong, Zimbabwe & Ireland) to localise and evaluate the materials in their contexts. Utilised by over 1030 schools/organisations in Australia and attracting over 23,000 unique users in the past year alone, *Climate Schools* is evidently a highly regarded and used resource that has made an exceptional contribution to the field of mental health.
Appendix of Support Material (max. 8 x A4 pages).

Publications list:


Book Chapters:


Screenshots of the Climate Schools website:

1. Student dashboard

![Mental Health Module](image)

**Mental Health Module**

- Module Introduction
- Links to NSW RTA Syllabus (2013)
- Implementation Guidelines
- Links to NPE Australian Curriculum (2013)

**Mental Health - Lesson 1**

Identifying anxiety and depression

Lesson 1 introduces anxiety and depression. It examines the things that can make people feel anxious and depressed and the sort of things that they can do to help with these feelings.

- Lesson 1: Teacher resources
- Lesson 1: Student resource (PDF)
- Lesson 1: Student resource (Word)

**Mental Health - Lesson 2**

Realistic thinking and thought challenging

Throughout Lesson 2 you will learn about negative thinking traps that people can fall into when feeling anxious or depressed. Helpful strategies such as realistic thinking and thought challenging are introduced.

- Lesson 2: Teacher resources
- Lesson 2: Student resource (PDF)
- Lesson 2: Student resource (Word)

2. Example cartoons (Mental Health Module)

![Example cartoons](image)
3. Student summaries

Realistic Thinking and Negative Thinking Habits

Tackling Unrealistic Thinking

When we are feeling anxious we tend to think unrealistically. We overestimate the likelihood that something bad will happen, and we underestimate how bad it would be if something did go wrong.

To tackle anxiety it is important to learn to think realistically.

The steps to thinking realistically include:

1. Identifying the situation:
   - What is happening?
   - What are your thoughts?
2. Examining all the evidence to see if the thoughts are really true.
   In order to come up with evidence you can ask yourself:
   - Where is the evidence:
     - What are the facts?
     - What else could happen?
     - What happened when I worried before / What is likely to happen?
     - What has happened to other people?
     - How likely is it that my worrying thought will come true
3. Reviewing all this evidence and coming up with more helpful, realistic thought that you can use when next in the situation.

4. Optional teacher-facilitated activities

Try it for yourself...

Use the Realistic Thinking worksheet on the previous page as a model for filling out the worksheet below.

Write down a situation you were in that made you anxious, and then write down the thoughts that occurred at the time. Use these thinking questions to discover a realistic thought that would be most helpful in that situation.

A different perspective

Believe it or not those negative thought patterns can have a strong effect on the way we feel, but we can recognize these negative thoughts and stop the way they cloud our judgment of a situation.

Think back to Will....

Look at the negative thought patterns he displayed in lesson 2 and how each thought may have made him feel.

<table>
<thead>
<tr>
<th>Thoughts</th>
<th>Feelings</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can’t do anything right / I’m never going to get a good grade</td>
<td>'I’m going to fail my assignments. Fail at trying and have a worthless life.'</td>
</tr>
<tr>
<td>'I can’t do anything right / I’m never going to get a good grade</td>
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</tr>
<tr>
<td>If your friend was thinking the same way Will was thinking, what would you say to them? Fill in the table below.</td>
<td></td>
</tr>
<tr>
<td>Your friend’s thought</td>
<td>Your response to your friend</td>
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<tr>
<td>'I’m going to fail my assignments. Fail at trying and have a worthless life'</td>
<td></td>
</tr>
</tbody>
</table>

| If your friend was thinking the same way Will was thinking, what would you say to them? Fill in the table below. |
| Your friend’s thought | Your response to your friend |
| 'I can’t do anything right / I’m never going to get a good grade' |
| 'I just don’t see the point in trying anymore' |
Rebranding *Climate Schools* to *OurFutures* – sample of updates made in response to consumer consultation

5. Cartoon graphics – changing landline phones to smartphones & updating clothing/characters

6. Scripts – e.g., changing “pills” to “caps”
7. Interactive activities

8. Multilingual translation