# POSITIVE CHOICES & Climate Schools

# Empowering young Australians

Professor Maree Teesson AC
The Matilda Centre







#### **Acknowledgements & Declaration**

We would like to acknowledge the contributions of the Chief and Associate Investigators and the staff of The Matilda Centre. We would also like to acknowledge the many community members from around the country who contribute to our research.

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We acknowledge all of the students, teachers and schools involved in the research and the assistance of the NSW, WA and QLD departments of Education and Catholic Education Department and Independent Schools



**Declaration:** Maree Teesson and Nicola Newton are the directors of CLIMATESCHOOLS PTY LTD, an Australian company set up in 2015 to distribute the online CLIMATESCHOOLS Programs. Income from the company supports the distribution.

























Within **one year**, AFL, NRL and Cricket broadcasts draw a cumulative viewing audience of

26.9 million children

During this time, **these children** will be exposed to

50.94 million

instances of alcohol advertising.



- 1. Unite and addressent exposure to accord advertising in Australia's major televised sports, can 5, O bren N, Ferris J, et al. Didg and Alconol neview 2015; DOI: 10.1111/dai.12520.
- 2. Alcohol Advertising: The Effectiveness of Current Regulatory Codes in Addressing Community Concern (2014), p52. Australian National Preventive Health Agency.
- 3. Alcohol Advertising Review Board: Annual Report 2014-15, p5.

## Alcohol and other drug use in Australia

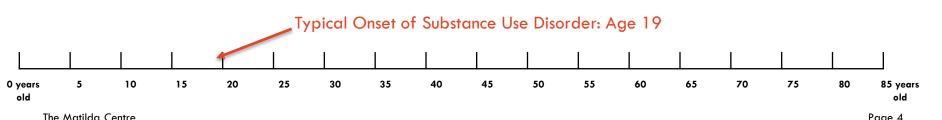
#### Among young people aged 14-19 (in the last year):

- 56% consumed alcohol
- 12% used cannabis
- 3% used ecstasy
- 1% used some form of methamphetamine
- <1% used New Psychoactive Substances(NPS)</p>



Source: NDSHS 2016

#### The peak onset of drug and alcohol use is during teenage years



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# Why prevent?

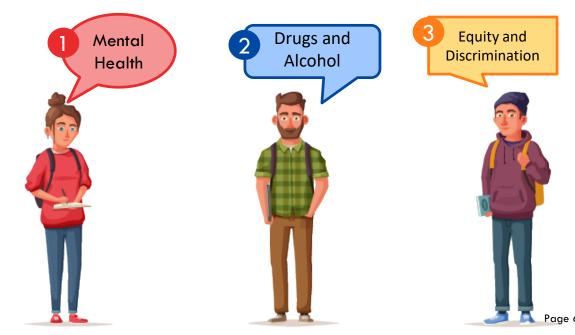
- Burden of disease associated with AOD use is substantial.
- Associated harms are considerable peak impact is 15-24yrs
- Early initiation leads to:
  - Substance use disorders
  - Comorbid mental health problems
  - Poor academic performance/drop out
  - Neuropsychological deficits
  - Less likely to access treatment



#### Young people want a better future



Mission Australia asked over 24,000 young Australians what they think are the most important issues in Australia today



#### Young people are starting to drink later



Source: National Drug Strategy Household Survey

# Rates of risky drinking are significant

- Rates of <u>very high risk</u> binge drinking are significant and are highest among young people
- Younger people remain more likely to be victims of alcohol related crime



Source: 2016 National Drug Strategy Household Survey

## Risk factors for teenage drug & alcohol use

- -Peer use, and confidence to assert own choices (Trucco et al. 2011)
- Perception of use as normative ("everyone is doing it") (Amialchuk et al., 2019)
- -Mental Health and behavioural problems (Birrell et al., 2016)
- -Parental attitudes, monitoring, and rule setting
  (Yap et al., 2017; Tael-Oeren et al; 2019; Newton, 2018)



# Reviews of school-based drug prevention



# Effective principles of school-based drug prevention

- Evidence-based and theory driven
- Developmentally appropriate & immediately relevant
- Implemented prior to harmful patterns of use
- Part of a comprehensive health education curriculum
- Use of peer leaders but keeping teacher as the central role
- Employ interactive teaching methods
- Adopt a social influence or comprehensive approach

Sources: Newton et al., 2013, Botvin & Griffin, 2007, Midford et al., 2001; 2002, Tobler et al., 1999; 2000, Foxcroft, & Tsertsvadze, 2011, Faggiano et al., 2014, Dusenbury, L., & Falco, 1995)

## Common obstacles to effective implementation

- Insufficient resources e.g. time & money
- Adaptation
- Lack of training
- Commercially based packing
- Sustainability



Poor implementation ——— poor outcomes



# A new approach was needed

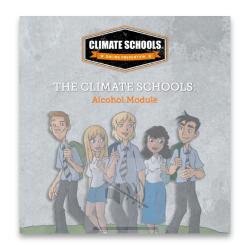
- 1. Evidence-based
  - adheres to effective principles of drug prevention
- 2. Overcame barriers to implementation
  - to increase fidelity & outcomes
- 3. Improved student engagement



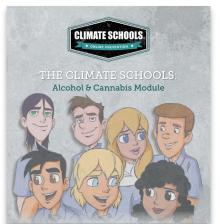
## Climate Schools program



Universal prevention programs which aim to prevent substance use and related harms in adolescents

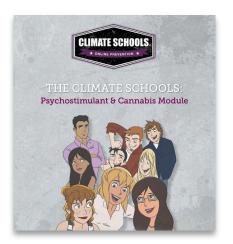


Alcohol module
(Yr 8: 13-14yr olds)



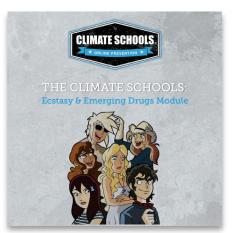
Alcohol & Cannabis module

(Yr 8/9: 13-15yr olds)



Cannabis & Psychostimulant module

(Yr 9/10: 14-16yr olds)



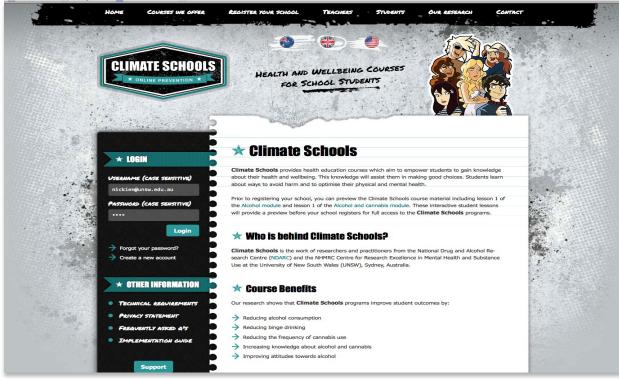
Ecstasy & Emerging Drugs module

(Yr 11: 16-17yr olds)

## Integrated into the learning centre

climateschools.com.au





#### Part 1: Online lessons

#### climateschools.com.au



#### **Psychostimulant & Cannabis - Lesson 1**



This lesson will teach you about:

- What cannabis is.
- Acute/short-term effects: physical, psychological and social.
- Reasons why people might choose to use or refrain from cannabis use.
- · Cannabis and the law.
- Risk factors and preventative factors for drug use.
- Prevalence of cannabis use.
- Mental health and cannabis.

Cartoon

📙 Teacher summary

Activities

Student summary

#### Psychostimulant & Cannabis - Lesson 2



This lesson will teach you about:

- Critically analysing drug related internet and media resources.
- · Classifying drugs as hallucinogens, stimulants and depressants.
- Common names and properties of psychostimulant drugs.
- · Short-term effects of psychostimulants.
- · Prevalence of use of psychostimulants.
- The multifaceted nature of the effects of drug use on people's lives.

Cartoon

Teacher summary

Activities

Student summary













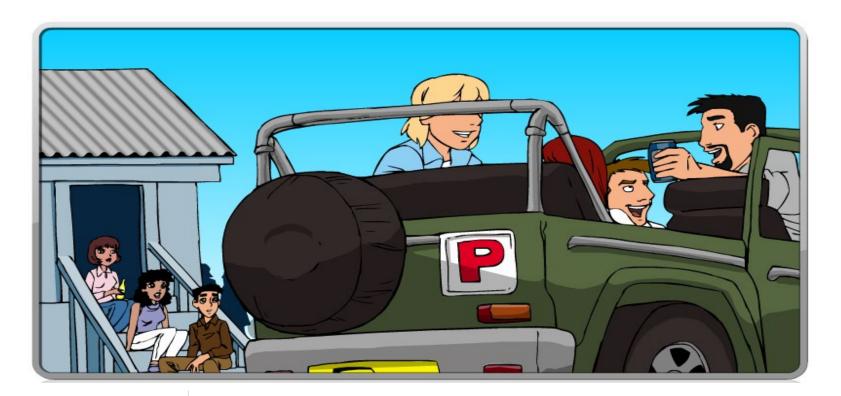




Brain and Mind Centre























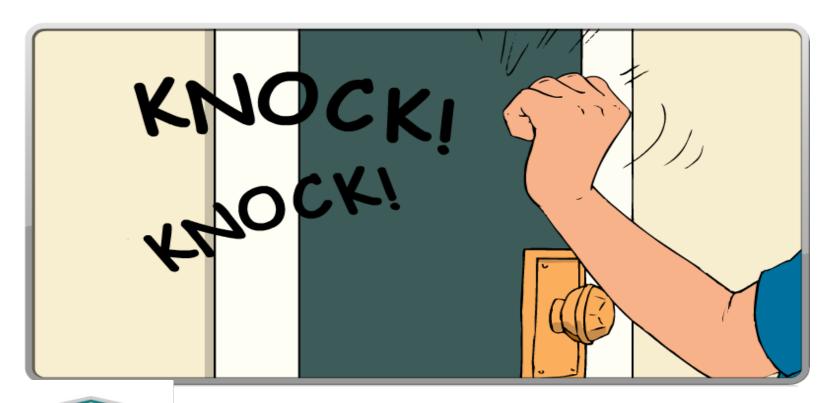






































To be continued....

#### Online lesson summaries

#### climateschools.com.au

#### STUDENT SUMMARY

#### **METHAMPHETAMINE**

What is the difference between amphetamine and methamphetamine? Methamphetamine is a chemical compound which is very closely related to amphetamine, but stronger. Amphetamine was common in Australia in the early 1990s, but nowadays what you buy on the streets is almost always methamphetamine.

#### How is methamphetamine made?

Methamphetamine is a synthetic or man-made drug which is typically made in backyard laboratories and sold illegally. However, certain types of amphetamines are made by pharmaceutical (medicine) companies and can legally be prescribed by a doctor to treat different medical conditions.

These over-the-counter amphetamines will be briefly covered at the end of this section. The remainder of this section will address those forms of the drug which are illegal.

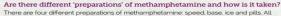


Unless amphetamines are prescribed for a person by a medical practitioner, possessing, using, making or selling amphetamine/methamphetamine is against the law. Methamphetamine and the law will also be covered in greater detail in lesson 6.

What are some of the different names for methamphetamine?

There are many different names used for methamphetamine, including





four preparations are the same drug. They only vary in strength and appearance.

Speed: Speed is a white or off-white powder and is typically of low strength. It can be snorted (that is sniffed up through the nose), injected or taken orally (swallowed). Speed is usually mixed (cut') with glucose, bicarbonate soda, ephedrine, pseudoephedrine, vitamins, Epsom salts or some other substance to cheaply make larger quantities to increase profits. There is no quality control on illegal drugs, which means there is no guarantee that what you are buying is safe.

Base: Base is a damp or oily substance with a white or yellow-brown colour which is stronger than speed powder. It is typically injected and sometimes swallowed.

Ice: Ice, also known as 'crystal meth', is methamphetamine in its strongest form. It has a frosted to white crystalline appearance. Ice is usually smoked or injected. The effects are stronger and it can cause agitation, worse comedowns and it is very addictive.

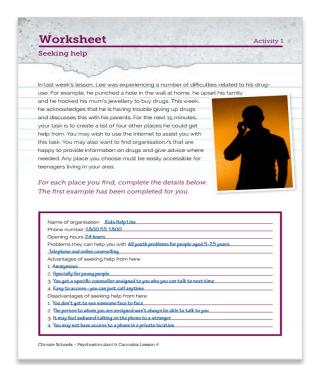
Pills: Methamphetamine has also been sold in pill form on

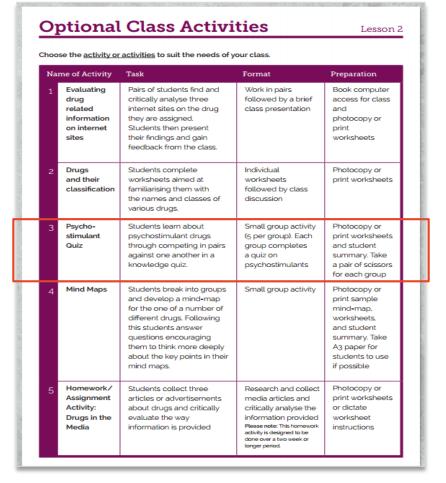
the ecstasy market to people who think they are buying ecstasy. These pills contain only small dose of methamphetamine, which is often combined with Ketamine (hallucinogen made from veterinary drug used to block the feeling of pain) to give an ecstasy like effect. These pills are usually swallowed.





# Part 2: Optional activities







#### Climate Schools: Alcohol module

- Two independent RCTs
- Summary of results:
  - ✓ Increased alcohol knowledge
  - Decreased average consumption of alcohol
  - Decreased binge drinking
  - ✓ Decreased alcohol-related harms
  - Decreased positive expectancies
  - ✓ Positive teacher & student evaluations

- 1. Vogl, L. Teesson, M. et al. (2009). Addiction.
- 2. Newton, N. et al. (2009). ANZJP.





#### Climate Schools: Alcohol & Cannabis module

- Three independent RCTs
- Summary of results:
  - ✓ 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

- 1. Newton, N., Teesson, M. et al. (2010). Addiction.
- 2. Newton, N. et al. (2009). Preventive Medicine.
- 3. Champion K. et al. (2016). ANZJP.
- 4. Teesson M & Newton N (2018) Psychol Med





## Climate Schools: Cannabis & Psychostimulant module

- Summary of results:
  - ✓ Increased 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

Vogl, L. et al (2014). Substance abuse treatment, prevention, and policy.





### Climate Schools: Ecstasy & Emerging Drugs module

- Summary of results:
  - ✓ Increased knowledge about ecstasy & New Psychoactive Substance (NPS)
  - Reduced intentions to use synthetic cannabis and any NPS
  - ✓ Positive teacher & student evaluations

Champion, K.E. et al. (2016). Addiction. Champion, K.E. e al (2017)





# Australian evidence base behind Climate Schools

- 7 RCTs in Australia (6 complete, 1 ongoing)
- 169 schools and > 14,600 students have participated across NSW, WA, VIC, ACT, QLD
- 24 papers reporting effectiveness
- Effect sizes for the AOD use uptake d=0.16 0.38



#### Addiction





Internet-based prevention for alcohol and cannabis use: final results of the Climate Schools course

Nicola C. Newton<sup>1</sup>, Maree Teesson<sup>1</sup>, Laura E. Vogl<sup>1</sup> & Gavin Andrews<sup>2</sup>

University of New South Wales, National Drug and Alcohol Research Centre, Sydney, NSW, Australia<sup>1</sup> and University of New South Wales, Clinical Research Unit for Arosinty and Depression, St Vincent's Hospital, Sydney, NSW, Australia<sup>2</sup>

Research



A cross-validation trial of an Internetbased prevention program for alcohol and cannabis: Preliminary results from a cluster randomised controlled trial Australian & New Zealand Journal of Psychiatry 2016, Vol. 50(1) 64–73 DOI: 10.1177/0004867415577435

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Katrina E Champion, Nicola C Newton, Lexine Stapinski, Tim Slade, Emma I, Barrett and Marce Teesson

Vogl et al. Substance Abuse Treatment, Prevention, and Policy 2014, 9:24 http://www.substanceabusepolicy.com/content/9/1/24



#### RESEARCH

Open Access

A universal harm-minimisation approach to preventing psychostimulant and cannabis use in adolescents: a cluster randomised controlled trial

Laura Elise Vogl<sup>1</sup>, Nicola Clare Newton<sup>2\*</sup>, Katrina Elizabeth Champion<sup>2</sup> and Maree Teesson<sup>2</sup>

#### Abstract

Background: Psychostimulants and cannabis are two of the three most commonly used illicit drugs by young Australians. As such, it is important to deliver prevention for these substances to preven their misuse and to reduce associated harms. The present study aims to evaluate the feasibility and effectiveness of the universal computer-based Climate Schools: Psychostimular and Cannabis Module.

Methods: A cluster randomised controlled trial was conducted with 1734 Year 10 students (mean age = 15.44 years; SD = 0.41) from 21 secondary schools in Australia. Schools were randomised to receive either the six lesson computer-based Climate Schools program or their usual health classes, including drug education, over the year.

Results: The Climate Schools program was shown to increase knowledge of cannabis and psychostimulants and decrease pro-drug attitudes. In the short-term the program was effective in subduing the uptake and plateauing the frequency of ecstasy use, however there were no changes in meth/amphetamine use. In addition, females who received the program used cannabis significantly less frequently than students who received may deducation as usual. Finally, the Climate Schools program was related to decreasing students' intentions to use meth/amphetamine and ecstasy in the future, however these effects did not last over time.

Conclusions: These findings provide support for the use of a ham-minimisation approach and computer technology as an innovative platform for the delivery of prevention education for illicit drugs in schools. The current study indicated that teachers and students enjoyed the program and that it is feasible to extend the successful Climate Schools model to the prevention of other drugs, namely cannable and psychostimulants.

Trial registration: Australian and New Zealand Clinical Trials Registry ACTRN12613000492752.

Keywords: School, Harm-minimisation, Computer-based, Universal, Psychostimulant, Cannabis, Prevention

#### International evidence base behind Climate Schools

- Trial in the UK
- 222 students and 11 teachers at secondary schools in London.
- Overall, Climate Schools was found to be feasible and acceptable in the UK.

Open Access

Research

BMJ Open A pilot study of an online universal school-based intervention to prevent alcohol and cannabis use in the UK

Nicola C Newton, 1,2 Patricia J Conrod, 2,3 Daniel M Rodriguez, 1 Maree Teesson 1

To cite: Newton NC, Conrod PJ, Rodriguez DM, et al. A pilot study of an online universal school-based intervention to prevent alcohol and cannabis use in the UK. BMJ Open 2014;4: e004750. doi:10.1136/ bmjopen-2013-004750

► Prepublication history for this paper is available online. To view these files please visit the journal online (http://dx.doi.org/10.1136/ bmjopen-2013-004750).

Received 2 January 2014 Revised 18 April 2014 Accepted 25 April 2014

#### ABSTRACT

Objectives: The online universal Climate Schools intervention has been found to be effective in reducing the use of alcohol and cannabis among Australian adolescents. The aim of the current study was to examine the feasibility of implementing this prevention programme in the UK.

Design: A pilot study examining the feasibility of the Climate Schools programme in the UK was conducted with teachers and students from Year 9 classes at two secondary schools in southeast London. Teachers were asked to implement the evidence-based Climate Schools programme over the school year with their students. The intervention consisted of two modules (each with six lessons) delivered approximately 6 months apart. Following completion of the intervention, students and teachers were asked to evaluate the programme.

Results: 11 teachers and 222 students from two secondary schools evaluated the programme. Overall, the evaluations were extremely positive. Specifically, 85% of students said the information on alcohol and cannabis and how to stay safe was easy to understand.

#### Strengths and limitations of this study

- A pilot study examining the feasibility of the internet-based Climate Schools programme in the UK was conducted with 222 students and 11 teachers at secondary schools in London.
- Student evaluations were extremely positive with approximately 85% reporting that the information taught in the programme was easy to understand and learn.
- Teacher evaluations were extremely positive with all teachers reporting that the students were able to recall the information and over 80% saying that they would be likely to use the programme in the future and recommend it to others.
- Overall, the online school-based Climate Schools prevention programme was found to be feasible and acceptable to students and teachers in the
- A full evaluation trial of the Climate Schools intervention is now required to examine its effectiveness in the UK.

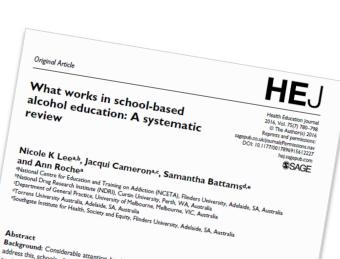


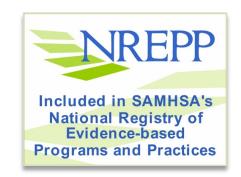


#### **Evidence base behind Climate Schools**

- Cited in a number of influential reviews (e.g Cochrane)
- Registered with US National Register of Evidence-based Programs & Practices (NREPP)
- One of only three alcohol education programs rated as having good evidence of effect (Roche et al, 2014; Lee et al, 2016).



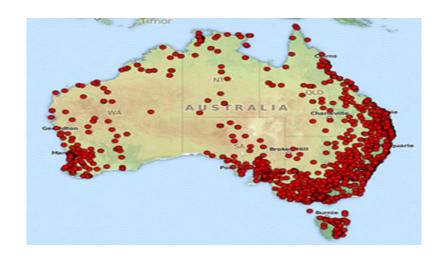




#### Who has Climate Schools reached?

- In addition to the participants in the trials (169 schools and >14,600 students)
- ~450 schools and >13,000 unique users have accessed Climate Schools online climateschools.com.au





## Where to Next? New program development



STRONG MEDEADLY FUTURES



An online drug prevention program for parents and students

**RCT** underway

A computerised drug prevention program for Aboriginal and Torres Strait Islander secondary students

In Development

An online multiple health behaviour change program to reduce chronic disease risk among students

In Development



### **Climate Schools Summary**



- Earlier initiation of use is associated with term negative outcomes.
- School-based prevention has proven effective in reducing use and related harms.
- Internet-based programs can be effective and increase engagement and scalability.
- Climate Schools provides an effective and efficient program for prevention.

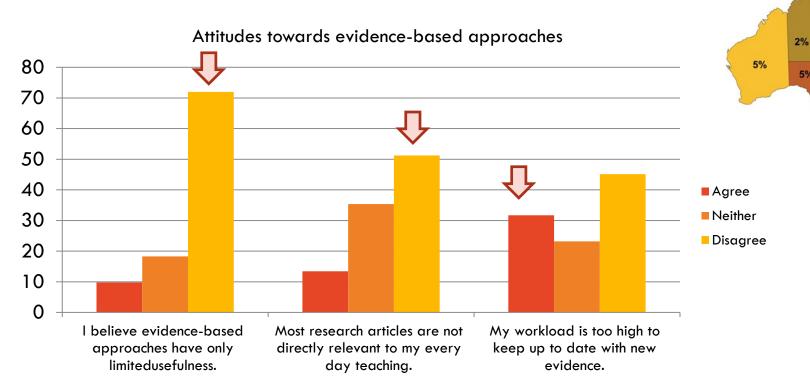
The Matilda Centre



The Matilda Centre

#### What are the barriers to evidence-based prevention?

Survey of teachers to assess current teaching practices, attitudes and barriers

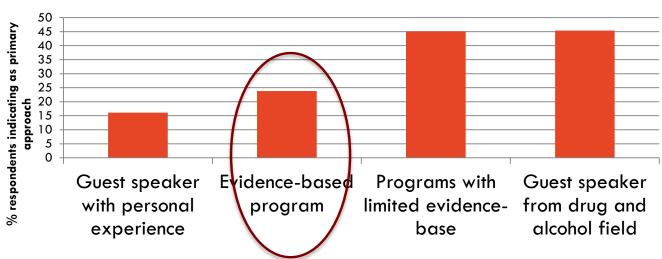


24%

44%

## What is currently being implemented in schools?

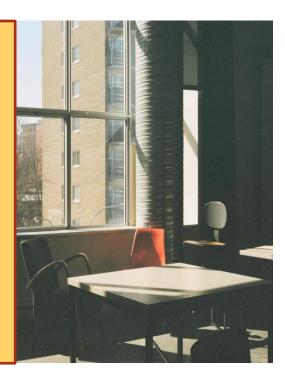
#### Primary approach to drug education



Stapinski, Lawler, Newton, Reda, Chapman & Teesson, 2017 Learning Communities Journal

## Barriers to evidence-based prevention

- Teachers reflected that they valued evidence-based approaches.
- Reported barriers to drug prevention were:
- ➤ Lack of support
- ➤ Lack of time
- > Student background & attitudes
- > Difficulty communicating
- Parental attitudes
- > Teacher confidence\*







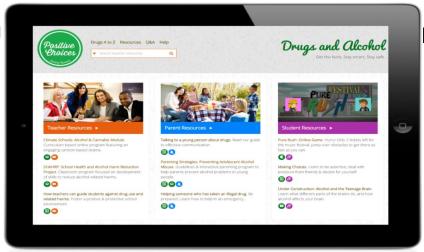
One-stop portal providing

up-to-date evidence-

based information

Builds on existing

research and resources



Resource developed
with teachers,
students & parents

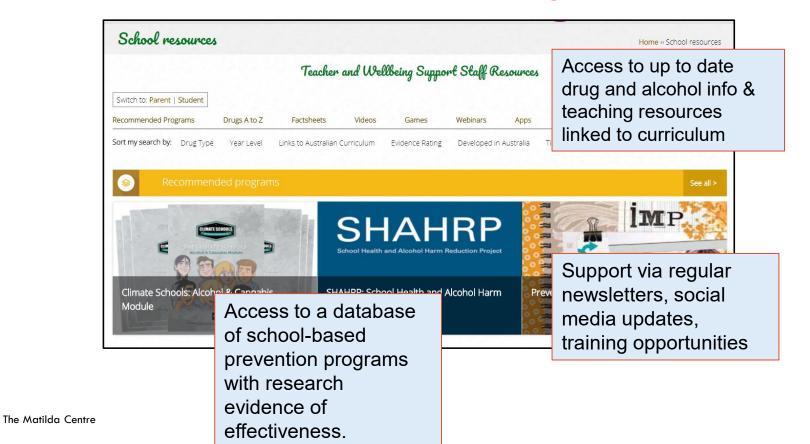
Online delivery &

ease of access





## Facilitating evidence-base prevention



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## **Reach and Engagement Since Launch**

Linking school communities to evidence based prevention





#### **Social Media Reach**



3.3 million
Facebook impressions



1.8 million
Twitter impressions

#### OVER 185,000

hardcopy resources distributed to every high school in



53% site users Australian



#### Monthly site user growth





## **Reach and Engagement Since Launch**

Linking school communities to evidence based prevention



#### **Newsletter**

Sent 4x year

Teachers: 1,468

Parents: 845



#### **Webinars**

13 webinars1,595 live viewers3,196 total views



## Conferences & events

44 Presentations/Workshops15 Booths/Conferences

## **Positive Choices Aboriginal and Torres Strait Islander Resources**

The Positive Choices portal now provides culturally appropriate resources for Aboriginal and Torres Strait Islander people. Resources include:











Factsheets

Games

**Programs** 









positivechoices1



pos\_choices

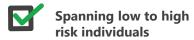


#### PREVENTION FRAMEWORK

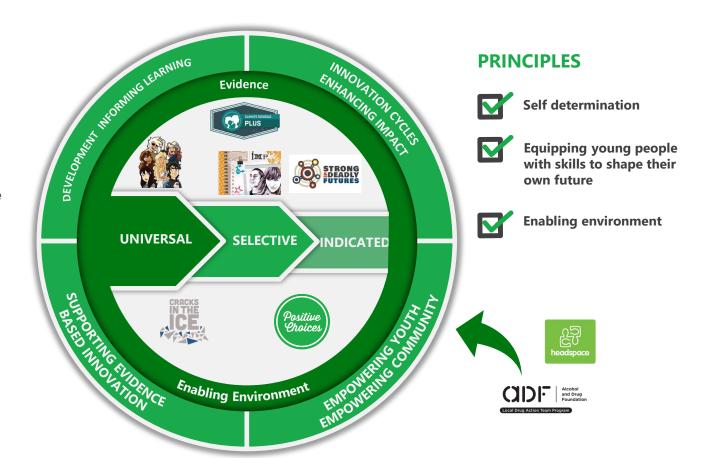
#### **OUR APPROACH**



Identify new and more effective ways to improve learning



Bridge evidence and community



#### Thank you

To find out more, visit: positivechoices.org.au climateschools.com.au

#### Presented by

Professor Maree Teesson AC

The Matilda Centre for Research in Mental Health and Substance Use

Maree.teesson@sydney.edu.au



**Declaration:** Nicola Newton and Maree Teesson are the directors of Climate Schools Pty Ltd - an Australian company set up in 2015 to distribute the online Climate Schools programs.

