



Evaluation of the NSW Life Education Program and its impact on Year 5 students

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Key findings

Objective 1. Life Education Program model and its delivery

The Life Education Program

The Program aims to develop children's awareness, knowledge, confidence and skills that they need to make more informed, safer and healthier choices, and is designed to be delivered to classes at least once a year, every year, from preschool through to secondary school.

The Program consists of 16 modules including three modules designed for Year 5 students that address tobacco, alcohol or other drug use ('On the Case', 'Think Twice' and 'Decisions').

Life Education Program delivery model in NSW

Delivery of the Program within schools involves pre-visit support, selected module delivery directly to students, and provision of resources for teachers, parents and students resources.

The school teacher survey indicated the majority of schools annually booked the Life Education Program for each Year group (54%).

School teachers reported there was considerable variability in:

- Provision of particular program resources to schools by Life Education (30%-84%);
- Teacher use of resources following the session (21%-81%);
- Perceived usefulness of such resources (36%-95%).

Effectiveness of Life Education Program was reported by Administrators and Educators to be hindered by students receiving less than its designed dose (e.g. due to supplementary activities not being implemented).

School fund the delivery of the Life Education Program and Life Education suggest a fee of \$10 per student is requested from parents.

The school teacher survey indicated the majority of schools sought funding from parents to supplement the Program delivery costs (72%).

Generally, teachers had positive attitudes towards the Life Education Program drug and alcohol modules, however few agreed it was appropriate for schools or parents to pay for the delivery of mandated curriculum by Life Education (31% and 33% respectively).

Findings from the semi-structured interviews reported Life Education Administrators and Educators considered the delivery of the Life Education Program was hindered by its cost to schools and parents.

Whilst the engagement of external providers such as Life Education in the delivery of 'drug education' aligns with the Engaging External Providers for Curriculum Implementation Guidelines, 23% of teachers agreed external agencies should deliver drug education rather than school teachers.

Program delivery standards

The Program is delivered by Educators that are provided with training and an Educator manual describing suggested activities, learning outcomes and teaching methods for each Life Education module.

All Educators reported receiving or participating in training and support during 2018, and quality assurance processes are reported to be implemented including delivery guidelines and an Educator performance review system.

Delivery of Life Education drug and alcohol modules in NSW primary schools

Results from the observational audit of Year 5 Life Education drug and alcohol modules compared to the relevant Educator manuals for 'On the Case', 'Think Twice' and 'Decisions' indicated there was variability in the proportion of:

- Observed lesson activities as described in relevant Educator manuals (45%-72%);
- Observed teaching methods as described in relevant Educator manuals (45%-70%);

- Observed lesson activities aligned to the specified key learning outcomes as described in relevant Educator manuals (57%-90%).

This variability is supported by the findings of the Administrator and Educator interviews regarding planned and unplanned adaptation of program delivery. The observed variability in lesson activities and teaching methods also aligns to information from the Life Education manuals that indicates that the manuals are the starting point to implementing modules and that Educators are encouraged to tailor delivery to school context and circumstance, and it was generally accepted by that delivery differs between Educators.

Life Education Administrators and Educators suggested various strategies could strengthen Life Education Program delivery, including increased funding; web-based delivery and booster sessions; effectiveness studies; and increasing school use of Life Education resources to ensure receipt of intended Program dose.

Objective 2. Population reach and school uptake of the Life Education Program in 2017/2018

Results from the evaluation indicated that the Program was delivered to approximately half of NSW primary schools in 2017/2018 reaching 260,432 students, of which 63,675 were Year 5 students.

Of the Year 5 drug and alcohol modules, 'Decisions' module was most frequently delivered (29%), followed by 'On the Case' (17%) and 'Think Twice' (10%).

The Life Education Program is designed to be delivered to classes at least once a year, every year, from preschool through to secondary school and through such exposure to have a cumulative benefit for participants.

Data provided by Life Education indicated that only 16% of schools that participated in the effectiveness study in 2018 had booked annual Life Education sessions for Year 5 students over the last five years (2014-2018), suggesting the Life Education program may not be delivered as intended.

Objective 3. Short-term impacts of the Life Education Program in Year 5 students

The Life Education Program aims to develop children's awareness, knowledge, confidence and skills that they need to make more informed, safer and healthier choices. Results from the effectiveness study indicated that the Program had:

- No impact on the students' intentions to use or avoid tobacco, alcohol and other drugs in the future (including within additional sensitivity, per protocol and subgroup analyses; primary study outcome);
- A consistent positive effect on student knowledge regarding tobacco, alcohol and other drugs at immediate follow up, which was maintained at 6 month follow up at approximately half the original effect size across outcomes;
- A positive effect initially on student awareness regarding tobacco, however this effect was not maintained at 6 month follow up;
- No impact at either immediate or 6 months follow up on:
 - Alcohol or other drug awareness at immediate or 6 months follow up;
 - Confidence to avoid tobacco, alcohol and other drugs in the future;
 - Protective factors for tobacco, alcohol and other drug use.

Objective 4. Cost and cost effectiveness analysis of the Life Education Program

The cost to deliver the Life Education Program to 1998 NSW primary schools in 2017/2018 from a public finance perspective was \$5,825,000, of which \$753,284 was spent on the delivery of Year 5 Life Education drug and alcohol modules 'On the Case', 'Think Twice' and 'Decisions'.

The cost from the NSW Health perspective was \$263,649 to deliver the Year 5 Life Education drug and alcohol modules, which represents 12% of the total NSW Health funding (\$2.1 million) that was provided to Life Education in 2017/2018.

Cost analyses indicated that a mean investment of \$1,288 (95%UI \$1,201, \$1,400) per school from the public finance perspective is required to achieve the changes in knowledge scores reported in the effectiveness study.

Executive summary

Background

Tobacco, alcohol and illicit drug use each contribute significantly to the global burden of disease, with negative impacts on both individuals and society overall. Despite a declining trend in some population groups, a significant proportion of Australian adults use tobacco, alcohol and illicit drugs. Evidence shows that the earlier initiation of use of such substances, the greater the risk of ongoing use and long-term negative health impacts. Given this, international guidelines recommend the prevention of initiation of tobacco, alcohol and illicit drug use by children as a key strategy in reducing the overall burden of such substance use.

Schools have been identified as a key setting for the prevention of initiation of tobacco, alcohol and illicit drug use as they represent an almost universal access point to deliver programs to children. Three previous Cochrane reviews have synthesised the evidence for school-based substance use prevention interventions, citing social competence, social influence, and some psychosocial approaches as being effective in the prevention of adolescent tobacco, alcohol and other drug use. Across all three reviews, no evidence of effect was found for interventions focused solely on the provision of knowledge. A recent rapid review of reviews identified 15 characteristics of effective school substance use interventions in middle school-aged children, with such characteristics related to the theoretical basis, content, delivery, and dose of intervention.

In Australia, national and state school curricula address the prevention of initiation of tobacco, alcohol and other drug use. In New South Wales (NSW), it is mandatory for all schools to deliver age appropriate 'drug education' to students via the NSW Education Standards Authority Personal Development, Health and Physical Education syllabus. Schools have an option of meeting mandated 'drug education' teaching and learning obligations by engaging external providers to deliver the curriculum content under the Engaging External Providers for Curriculum Implementation Guidelines. The delivery of school-based drug and alcohol education is also a priority for the NSW Ministry of Health.

One school-based drug and alcohol education program that NSW primary schools can select to use is the Life Education Program. Established in 1979, the Life Education Program is a curriculum-based program consisting of a series of modules designed for specific age groups that aim to build awareness, encourage reflection, provide knowledge, develop strategies, and help students develop skills and confidence.

Topics covered by Life Education modules include tobacco, alcohol and other drugs, body knowledge, personal safety, healthy lifestyle, social skills, relationships, cyber safety, decisions making and peer pressure. In 2018, 16 modules were available, of which five focus explicitly on tobacco, alcohol or other drugs for primary school-aged children, and three for Year 5 children.

The Life Education Program was designed so that in each school year children would participate in a different module, and such cumulative exposure to the Program over the years of schooling would have a lasting effect on student outcomes. The Life Education Program is delivered to school students by specially trained Educators via mobile classrooms. Its implementation is funded by schools and/or parents and other funding sources.

Previous evaluations of the Life Education Program using a variety of evaluation designs have reported positive intervention effects on student tobacco and alcohol knowledge and awareness, but no positive effect on tobacco, alcohol or other drug use, or on intentions to use such drugs. Further evaluation studies of the Program have described teachers' use, satisfaction, relevance and perceived effectiveness of Life Education drug and alcohol modules to be high. No previous evaluations of the Life Education Program has reported uptake and population reach in NSW, or cost effectiveness of the Program.

The delivery of the Life Education Program in NSW is supported in part by funding from the NSW Ministry of Health.

This report describes the outcomes of an evaluation of the Life Education Program commissioned by the NSW Ministry of Health.

Objectives of the evaluation

A pragmatic, real world evaluation of the Life Education Program was conducted. The objectives of the evaluation were to:

1. Describe the Life Education Program model and how it is implemented in NSW schools;
2. Assess the population reach and school uptake of the Life Education Program in NSW in 2017/2018;
3. Investigate the short-term impacts of the Life Education Program on NSW Year 5 students including:
 - Intentions to use tobacco, alcohol and other drugs in the future;
 - Awareness of, knowledge of, attitudes towards and skills in avoiding tobacco, alcohol and other drug use;
4. Document the costs associated with delivery of the Life Education Program in NSW in 2017/2018.

To address these objectives, a mixed methods evaluation was conducted between February 2018 and July 2019 that involved quantitative and qualitative studies; pre-post, controlled and post-test only study designs; and the collection of retrospective and prospective data. The alignment of the evaluation objectives to the structure of this report is shown in Table 1 below. The selected study designs and methods reflect the pragmatic nature of the evaluation, conducted in the context of routine delivery of the Life Education Program in NSW primary schools.

Table 1. Alignment between evaluation objectives and report structure

	Objective 1: Describe the Life Education Program and its implementation in NSW	Objective 2: Population reach and school uptake of the Life Education Program	Objective 3: Short-term impacts of the Life Education Program in Year 5 students	Objective 4: Costs of Life Education Program delivery in NSW
Chapter 2: Content, delivery, population reach and school uptake of the Life Education Program in NSW	✓	✓		
Chapter 3: Short-term effectiveness of participation in Life Education drug and alcohol modules on Year 5 student outcomes			✓	
Chapter 4: Economic evaluation of the delivery of the Life Education Program in NSW in 2017/2018				✓
Chapter 5: Observation of delivery of Life Education drug and alcohol modules in NSW primary schools	✓			
Chapter 6: School teacher use and perceptions of the Life Education Program and resources	✓			
Chapter 7: Life Education staff perceptions of the delivery of the Life Education Program in NSW	✓			

NB. NSW=New South Wales.

Objective 1. The Life Education Program and its implementation in NSW

Content and delivery of the Life Education Program in NSW

A summary of findings from a desktop review of the content and delivery of the Life Education Program in NSW (Chapter 2) is provided below.

The Life Education Program

Program vision, objectives, and aims

Life Education’s stated vision is to have “generations of healthy young Australians living to their full potential” achieved by “empowering our children and young people to make safer and healthier choices through education”.

The stated objective of Life Education is to contribute to the health and wellbeing of children and young people with the aim of helping them to develop the awareness, knowledge, confidence and skills that they need to make more informed, safer and healthier choices. Specifically, the Life Education Program aims to move students around the Life Education ‘Learning Circle’ (see Figure 1).

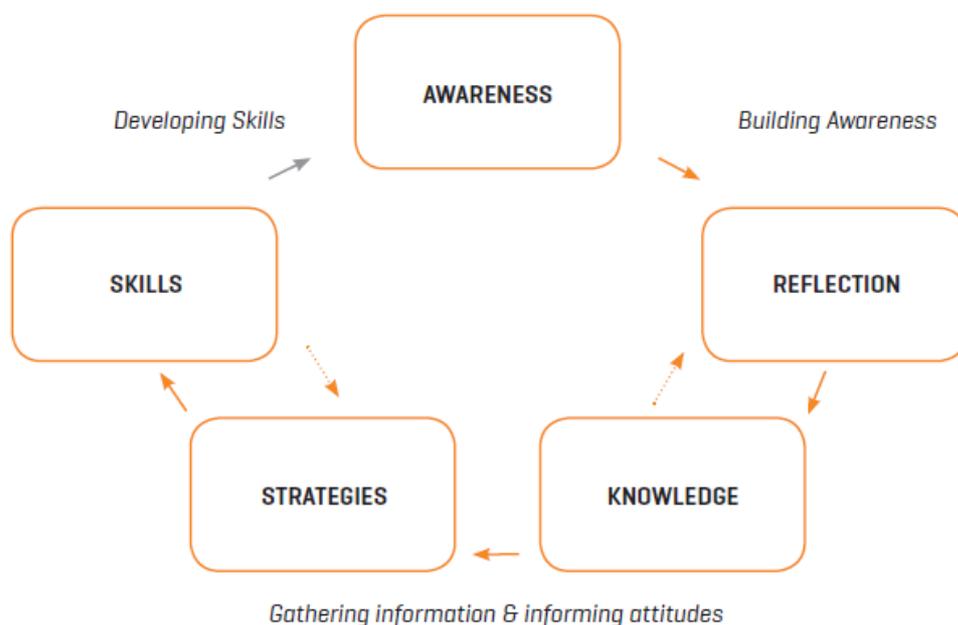


Figure 1. Life Education Learning Circle

To achieve its vision and objective, a curriculum-based program is offered to schools, for students aged 3-15 years. The Program is designed to be delivered as an integral part of school drug and health education and to be delivered to classes at least once a year, every year, from preschool through to secondary school.

Structure of the Life Education Program

The Life Education Program consists of 16 modules for preschools, primary and secondary schools to select from. The modules address a range of learning areas and issues, and are designed to provide age appropriate content, relevant to the issues specific for each stage of student development (early childhood, middle childhood, adolescence).

Seven of 16 modules involve content that address tobacco, alcohol or other drug use. Three of these seven modules are designed for Year 5 students and are the focus of this evaluation: ‘On the Case’ (Years 5 to 6), ‘Think Twice’ (Years 5 to 6), and ‘Decisions’ (Years 5 to 7).

The ‘On the Case’ module is focused on tobacco; the ‘Think Twice’ module is focused on alcohol; and the ‘Decisions’ module includes content related to tobacco, alcohol, prescription drugs and other drugs.

Life Education Program logic

The Life Education Program logic module is illustrated in Figure 2 below.

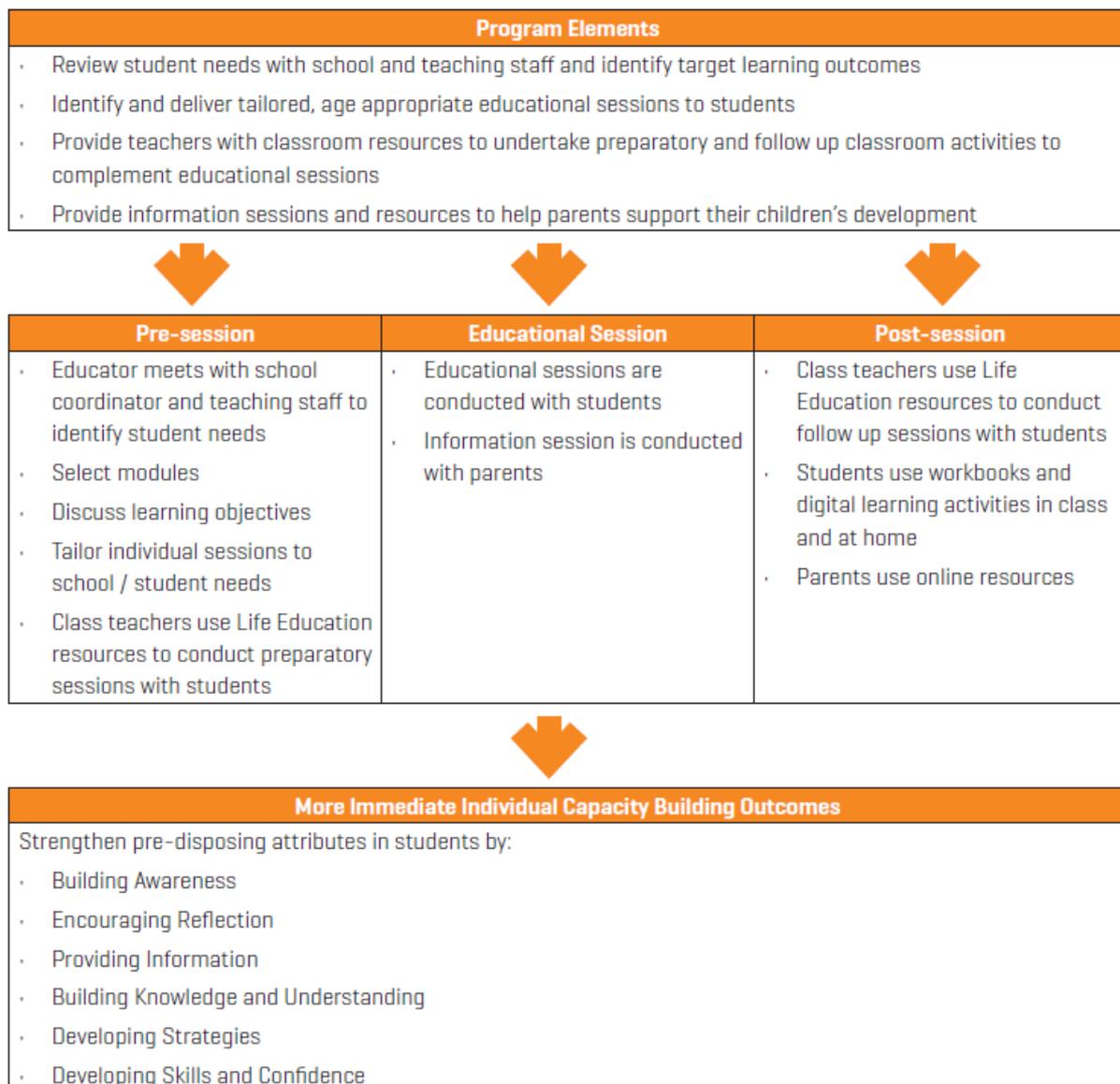


Figure 2. Life Education Program logic model

Life Education Program theory

Information regarding the theory on which the Life Education Program was originally developed was unable to be located by the desktop review. However, a previous review commissioned by Life Education reported that the Program as a whole was highly consistent with a number of motivational and behavioural theories.

Alignment of Life Education drug and alcohol modules to NSW Personal Development, Health and Physical Education syllabus

A self-assessment by Life Education of the 'On the Case', 'Think Twice' and 'Decisions' modules reported the modules to be aligned to the 13 relevant Stage 3 outcomes (i.e. Year 5 and 6) of the current NSW Personal Development, Health and Physical Education syllabus (K-6) and to the 11 relevant Stage 3 outcomes of the new NSW Personal Development, Health and Physical Education syllabus (K-10).

Alignment of Life Education drug and alcohol modules to best practice interventions

Comparison of the Life Education Program characteristics with reported characteristics of effective substance use prevention programs for middle school-aged children suggests the Life Education Program in NSW aligns to seven, partially aligns to five, and does not align with two of such characteristics.

Life Education Program delivery model in NSW

Life Education governance

Life Education Australia is a not-for-profit registered company responsible for the development of the Life Education Program; quality assurance; program evaluation; and national marketing and partnership activities. Life Education NSW is a not-for-profit organisation responsible for the delivery of the Life Education Program in NSW.

Life Education NSW delivery

Schools fund the implementation of the Life Education Program, which may include a request to parents for funding of \$10 per child (unless otherwise subsidised).

Life Education NSW adopts the following strategies to facilitate the delivery of the Life Education Program in NSW schools:

- Pre-visit support to schools to aid module selection and delivery;
- Delivery of Life Education modules via available delivery modes; and
- Provision of Life Education resources for Life Education Educators, schools and teachers (including supplementary Life Education lessons), parents, and students.

Program delivery standards

Program delivery standards are supported by Educator manuals for each Life Education module which include module specific learning outcomes and activities. Additionally, quality assurance and program evaluation activities involving Teacher and School Coordinator surveys are undertaken. No student or parent monitoring activities are routinely undertaken.

Delivery of Life Education drug and alcohol modules in NSW primary schools

An observational audit of the delivery of Life Education modules 'On the Case', 'Think Twice', and 'Decisions' to Year 5 students was conducted in five NSW primary schools (26% consent rate; Chapter 5).

Alignment of lesson activities to Life Education Educator manual activities, learning outcomes and teaching methods

Across the five observations:

- The mean proportion of observed lesson activities consistent with those in the relevant Life Education Educator manuals ranged from 45% to 72%;
- The proportion of learning outcomes from the Life Education manuals for which at least one lesson activity was observed ranged from 57% to 90%; and
- Between five and seven (45%-70%) of ten teaching methods from the Life Education manual were observed.

Life Education Educator confidence

Life Education Educator confidence in the delivery of the Life Education drug and alcohol lesson activities was rated by observers as 'very confident' for the delivery of each of the five observed Life Education sessions.

School teacher use and perceptions of the Life Education Program and resources

A cross-sectional study was conducted with 41 Year 5 classroom teachers from 27 NSW government schools (87% participation rate) to examine teachers' knowledge, attitudes and experiences of the Life Education Program and the delivery of drug education in schools more broadly (Chapter 6).

Life Education school selection and booking procedures

The majority of schools had previously booked the Life Education Program (96%) and just over half (54%) had an annual booking for each Year group. Most schools (72%) sought payment from parents to supplement the costs of implementing the Program.

School teacher consultation with Life Education Educator regarding module content

Between 27% and 35% of school teachers reported being consulted by the Life Education Educator regarding module content, with up to 6% requesting changes to content.

Use and quality of Life Education resources

Teachers recalled receipt of between 30% and 84% of twelve relevant Life Education resources. Between 3% and 30% of teachers reported use of each resource before the session, between 21% and 81% of teachers reported use of each resource after the session, and 36% to 95% reported the provided resources were useful.

Attitudes regarding the Life Education Program and the delivery of drug education in schools

Between 72% and 89% of teachers agreed the Life Education Program was: relevant to the curriculum; understood by, and effective in engaging students; would make a positive impact on students' future health related decisions; had a good selection of modules; was needed in their school community; and represented good value for money.

Thirty-one percent and 33% of teachers agreed it was appropriate for schools or parents to pay for the delivery of mandated curriculum by Life Education respectively, and 23% agreed external agencies should deliver drug education rather than school teachers.

Seventy-eight percent of teachers would recommend the school re-book the Life Education Program.

Delivery of supplementary Life Education lessons by Year 5 school teachers

Teachers reported supplementary Life Education lessons were delivered on 11%-16% drug education topics prior to, and 11%-46% drug education topics following the Life Education visit in 2018. Between 63% and 78% of teachers reported they were confident in teaching tobacco, alcohol or other drug education topics to their Year 5 class.

Parent involvement in the Life Education Program

Information regarding the Life Education visit, and parent resources were reported to have been provided to parents by 100% and 80% of schools respectively.

Life Education staff perceptions of the delivery of the Life Education Program in NSW

Semi-structured telephone interviews were conducted with 21 Life Education Administrators and Educators (40% participation rate) to describe their perceptions of the Life Education Program and its delivery in NSW (Chapter 7).

Life Education Program delivery in NSW

Factors that hinder or enhance program delivery and impact

Factors reported by Administrators and Educators to hinder delivery of the Life Education Program or drug and alcohol programs generally included: cost to schools and parents; children receiving less than intended dose; school or community attitudes regarding relevance of content in their community; and mobile learning centre physical access to schools.

Factors reported to enhance delivery of the Life Education Program or drug and alcohol programs generally included: Life Education brand awareness and unique learning experience; alignment to curriculum; support to identify funding for program implementation; third party delivery of drug education (i.e. external to school); and multi-strategy nature of program (i.e. including a parent component).

Standardised program delivery

Aspects of the Life Education Program considered by Administrators and Educators to be standardised include: student learning outcomes and resources for each module; NSW program delivery guidelines; and Educator training and performance reviews. The way the Life Education Program is delivered is not considered to be standardised due to Educator tailoring to school context and circumstance and consequently it was generally accepted that delivery differs between Educators.

Adaptations of the Life Education Program

Adaptations to program delivery were reported to be commonly made, with the need for such adaptations either explicitly assessed prior to delivery of the Program in schools (planned) or during delivery (unplanned).

Adaptations were made on the basis of: school community demographics or drug and alcohol issues; special needs of children; teacher requests; and time constraints. These adaptations included omitting, modifying or adding content.

Participants perceived an 'active approach' was taken to ensuring the Life Education Program design, content, resources, training and delivery used inclusive language and 'reasonable' measures to ensure the Program takes account of student diversity, background and learning styles. Aboriginal and/or Torres Strait Islander resources were reported to be developed with Aboriginal organisations, as well as community health groups and Educators for the 'On the Case' module only.

Training and support

All Educators reported receiving training and support during 2018.

Quality indicators or processes to monitor quality of delivery

Reported quality processes included: NSW quality delivery guidelines, Educator performance review system, and professional development expectations.

Equity strategies to ensure program access by all schools

Reported strategies for ensuring program access by socio-economically disadvantaged schools included: assistance seeking funding; inflatable classrooms to reduce costs; and flexible fee structures.

Strategies to increase uptake and reach of Life Education in NSW primary schools

Reported strategies included: raising local community and school awareness of the Program; national and state marketing strategies; Life Education staff with explicit partnership and marketing roles; and identification of strategies to address school barriers.

Future directions of school-based drug and alcohol programs

Strategies to strengthen school-based drug and alcohol program delivery

Reported strategies to strengthen Life Education delivery included: increased funding; ongoing improvement to Life Education drug and alcohol modules; web-based delivery and booster sessions; effectiveness studies; and increasing school uptake of Life Education resources to ensure the intended dose of Program is received.

Life Education response to increasing number of school-based drug and alcohol programs

Administrators suggested Life Education should respond by staying relevant and modern; using teaching and pedagogy that impacts the way students want to learn now; and continuously improving and meeting the needs of teachers and schools.

Objective 2. Population reach and school uptake of the Life Education Program

Data sourced from Life Education via the desktop review (Chapter 2), indicated that at least one Life Education Program module was delivered in 1195 (50%) of 2,411 NSW primary schools in the 2017/18 financial year reaching 260,432 students, of which 63,675 were Year 5 students.

Of the 12,795 Life Education sessions delivered across all Year groups, 2,966 sessions (23%) were for Year 5 students, of which 504 (17%) were 'On the Case' sessions (11,070 students), 297 (10%) were 'Think Twice' sessions (6,652 students), and 857 (29%) were 'Decisions' sessions (18,357 students).

Data sourced from Life Education indicated that 16% of NSW government primary schools (n=43) that participated in the effectiveness study (Chapter 3) had annually booked a Life Education module for their 2018 Year 5 student cohort over the last five years (2014-2018).

Objective 3. Short-term impacts of the Life Education Program in Year 5 students

The effectiveness of participation in one or more Life Education drug and alcohol modules on Year 5 student outcomes was assessed via a wait-list controlled study in 43 NSW government primary schools (27% participation rate) involving 952 students (67% participation rate; Chapter 3).

The primary outcome of the study was student intentions to use tobacco, alcohol and other drugs in the future. Secondary outcomes included awareness of norms (i.e. prevalence in adolescents), knowledge related to, and confidence to avoid using, tobacco, alcohol and other drugs. A range of exploratory (e.g. protective factors for tobacco, alcohol and other drug use such as self-esteem), contextual (e.g. previous exposure to drug and alcohol lessons) and impact measures (e.g. use of Life Education resources) were also assessed. Primary and secondary outcomes were assessed at both immediate follow up data to assess any initial impact of the Program, and 6 month follow up to assess any sustained impact of the Program.

Comparison between intervention and control groups in the prevalence of student-reported primary and secondary outcomes at immediate and 6 month follow up was undertaken using generalised and linear mixed models that accounted for potential clustering.

Program effectiveness

Primary outcome: intentions to use tobacco, alcohol or other drugs in the future

There was no significant difference between intervention and control students in the prevalence of intentions to use tobacco, alcohol or other drugs in the future at either immediate or 6 month follow up.

Similar results for the primary outcome were found in additional sensitivity, per protocol and subgroup and analyses:

- Sensitivity analyses:
 - Limited to the cohort of students who completed both the baseline and 6 month follow up surveys;
 - Accounting for students' previous exposure to Life Education drug and alcohol content in 2018; and
 - For all participating students irrespective of which drug and alcohol module they attended.
- Per protocol analyses of the effect of cumulative school-level participation in the Life Education Program over the last 5 years for the Year 5 cohort of interest defined by:
 - Life Education modules delivered in ≥ 4 of the last 5 years;
 - ≥ 4 Life Education drug and alcohol modules delivered over the last 5 years;
 - ≥ 4 of any Life Education modules delivered over the last 5 years.
- Subgroup analyses of differential impact of participating in Life Education drug and alcohol modules according to student substance use risk and protective factor characteristics.

Secondary outcomes

Knowledge related to tobacco, alcohol or other drugs

Intervention students had significantly greater knowledge scores at both immediate and 6 month follow up than control students regarding:

- Tobacco knowledge
 - Immediate follow up: MD 0.61 (95% confidence interval (CI) 0.41, 0.80))
 - 6 month follow up: MD 0.47 (95%CI 0.31, 0.63);
- Alcohol knowledge
 - Immediate follow up: MD 0.69 (95%CI 0.35, 1.03)

- 6 month follow up: MD 0.39 (95%CI 0.18, 0.61);
- Other drugs knowledge
 - Immediate follow up: MD 0.82 (95%CI 0.52, 1.11)
 - 6 month follow up: MD 0.43 (95%CI 0.18, 0.67).

Awareness of norms of tobacco, alcohol or other drug use in adolescents

There was a significant difference between intervention and control students for awareness of tobacco norms at immediate, but not 6 month follow up:

- Tobacco norm awareness
 - Immediate follow up: Odds ratio 4.15 (95% CI 2.27, 7.60).

There was no significant difference in awareness of alcohol and other drug use norms at either immediate or 6 month follow up.

Confidence to avoid using tobacco, alcohol or other drugs

There was no significant different in confidence to avoid tobacco, alcohol or other drugs in the future at either immediate or 6 month follow up.

Exploratory measures

There was no significant difference between intervention and control students in the mean scores or prevalence of any protective factors for tobacco, alcohol or other drugs at 6 month follow up.

Contextual measures

At baseline, 31%-36% of students reported having received a lesson on tobacco, alcohol or illegal drugs in 2018, compared to 42%-71% at 6 month follow up. At 6 month follow up, 8%-16% of intervention students had used the Life Education website, mobile app, or activity with parents, and 53%-62% had completed a Life Education activity with a teacher or used the Life Education student workbook in class.

Impact measures

At immediate follow up, after attending a Life Education session, 62%-86% of intervention students reported they felt they knew more about the harms or effects of tobacco, alcohol or illegal drugs; 77%-92% reported having learnt something new about tobacco, alcohol or other drug use.

At 6 month follow up, 41%-62% of intervention students reported that they felt they were less likely to smoke, drink alcohol or use drugs in the future after attending a Life Education session.

At 6 month follow up, 42%-51% of intervention students reported that they had discussed what they had learnt during a Life Education session with someone at home.

Objective 4. Costs of the Life Education Program delivery in NSW

A retrospective, trial-based economic evaluation of the Life Education Program versus control was conducted to describe the costs and cost effectiveness of the Life Education Program (Chapter 4).

The costs of delivering the Life Education Program in NSW (2017/2018) from the public finance perspective (and NSW Health perspective) were:

- The entire Life Education Program in NSW = \$5,825,000 (\$2,110,000);
- All Year 5 Life Education modules = \$1,349,368 (\$472,279);
- Life Education modules 'On the Case', 'Think Twice', and 'Decisions' = \$753,284 (\$263,649).

Cost-effectiveness analysis

Cost-effectiveness analyses on the three student outcomes where an effect was present at 6 month follow up, yielded the following incremental cost-effectiveness ratios (ICERs):

- \$75 (95% uncertainty interval (UI) \$53, \$120) per unit change in tobacco knowledge score;
- \$90 (95%UI \$54, \$206) per unit change in alcohol knowledge score;
- \$81 (95%UI \$49, \$206) per unit change in other drug knowledge score.

The results from the cost analyses, indicate that a mean investment of \$1,288 (95%UI: \$1,201, \$1,400) per school is required to achieve the changes in knowledge scores reported in the effectiveness study.

Summary and key conclusions

Objective 1. Life Education Program model and its delivery

The Life Education Program aims to develop children's awareness, knowledge, confidence and skills that they need to make more informed, safer and healthier choices, and is designed to be delivered to classes at least once a year, every year, from preschool through to secondary school.

Delivery of the Program within schools involves multiple components including pre-visit support, selected module delivery directly to students, and provision of resources for teachers, parents and students resources. The school teacher survey indicated the majority (54%) of schools annually selected the delivery of the Life Education Program for each Year group and that the majority of school seek funding from parents to supplement the Program delivery costs (72%). School teachers reported there was considerable variability in the provision of particular program resources to schools by Life Education (30%-84%), as well as teacher use following the session (21%-81%) and perceived usefulness of such resources (36%-95%). The effectiveness of the Life Education Program was considered by Administrators and Educators to be hindered by students receiving less than its designed dose (e.g. due to supplementary activities not being implemented).

The Program is delivered by Educators that are provided with training and an Educator Manual that describes suggested activities, learning outcomes and teaching methods for each of the Life Education modules. Life Education indicates that the manuals are the starting point to implementing modules and Educators are encouraged to tailor delivery to school context and circumstance, and consequently it was generally accepted that delivery differs between Educators. All Educators reported receiving or participating in training and support during 2018, and Administrators reported quality assurance processes are implemented including delivery guidelines and an Educator performance review system. Results from the

observational audit of module delivery indicated there was variability in the proportion of observed lesson activities (45%-72%), teaching methods (45%-70%) and lesson activities relative to specified key learning outcomes of each relevant Educator manual (57%-90%). This variability is supported by the findings of the Administrator and Educator interviews regarding planned and unplanned adaptation of program delivery.

School fund the delivery of the Life Education Program and Life Education suggest a fee of \$10 per student is requested from parents. Generally, teachers had positive attitudes towards the Life Education Program drug and alcohol modules, however few agreed it was appropriate for schools or parents to pay for the delivery of mandated curriculum by Life Education (31% and 33% respectively). Findings from the semi-structured interviews reported Life Education Administrators and Educators considered the delivery of the Life Education Program was hindered by its cost to schools and parents.

Whilst the engagement of external providers such as Life Education in the delivery of 'drug education' aligns with the Engaging External Providers for Curriculum Implementation Guidelines, 23% of teachers agreed external agencies should deliver drug education rather than school teachers.

Life Education Administrators and Educators suggested various strategies could strengthen Life Education Program delivery, including: increased funding; web-based delivery and booster sessions; effectiveness studies; and increasing school use of Life Education resources to ensure receipt of intended Program dose. Administrators suggested Life Education should respond to the increasing number of school-based drug and alcohol programs by: staying relevant and modern; using teaching and pedagogy that impacts the way students want to learn now; and continuously improve and meet the needs of teachers and schools.

Objective 2. Population reach and school uptake of the Life Education Program in 2017/2018

Results from the evaluation indicated that the Program was delivered to approximately half of NSW primary schools in 2017/2018 reaching 260,432 students, of which 63,675 were Year

5 students. Of the Year 5 drug and alcohol modules, 'Decisions' module was most frequently delivered (29%), followed by 'On the Case' (17%) and 'Think Twice' (10%).

The Life Education Program is designed to be delivered to classes at least once a year, every year, from preschool through to secondary school and through such exposure to have a cumulative benefit for participants. Data provided by Life Education indicated that only 16% of schools that participated in the effectiveness study in 2018 had booked annual Life Education sessions for Year 5 students over the last five years (2014-2018), suggesting the Life Education program may not be delivered as intended.

Objective 3. Short-term impacts of the Life Education Program in Year 5 students

The Life Education Program aims to develop children's awareness, knowledge, confidence and skills that they need to make more informed, safer and healthier choices. Results from the effectiveness study indicated that the Program had no impact on students' intentions to use or avoid tobacco, alcohol and other drugs in the future, or the risk and protective factors for such use. In contrast, the study found a consistent positive effect of participation in the Life Education drug and alcohol modules on improved student knowledge regarding tobacco, alcohol and other drugs at immediate follow up, an effect that was maintained at 6 month follow up at approximately half the original effect size (e.g. for other drugs, effect at immediate versus 6 month follow up was mean difference [MD] 0.82 and MD 0.43 respectively). There was some evidence the Program was effective initially in increasing student awareness regarding tobacco, however this effect was not maintained at 6 month follow up, and no effect was present for alcohol or other drug awareness at either follow up point.

Objective 4. Cost and cost effectiveness analysis of the Life Education Program

The cost to deliver the Life Education Program to 1998 NSW primary schools in 2017/2018 from a public finance perspective was \$5,825,000, of which \$753,284 was spent on the delivery of Year 5 Life Education drug and alcohol modules 'On the Case', 'Think Twice' and 'Decisions' (\$263,649 from a NSW Health perspective; which represents 12% of the total NSW Health funding that was provided to Life Education in 2017/2018).

The results from the cost analyses indicated that a mean investment of \$1,288 (95%UI \$1,201, \$1,400) per school is required to achieve the changes in knowledge scores reported in the effectiveness study.

Strengths and limitations

The conduct of this evaluation had a number of strengths, including the use of rigorous study designs and methods in the context of a pragmatic real-world program evaluation. The comprehensive mixed methods nature of the evaluation is a further strength providing an assessment of student outcomes as well as contextual, stakeholder and delivery-orientated data.

Interpretation of the evaluation findings should occur in the context of the characteristics of the component studies. Some studies were limited by the availability of existing data or documents to comprehensively address the specified study aims. Such limitations included the use of school-level rather than student-level administrative data regarding previous exposure to Life Education modules (Chapter 3), aggregate data rather than school-level data regarding program delivery in the economic study (Chapter 4), and inability to assess the impact of school-requested changes to module content in the observational study (Chapter 5).

The representativeness of findings in some studies is limited due to low participation rates. For example, for the observational study only 26% of schools consented to participate (Chapter 5), and 40% of eligible Life Education staff participated in the semi-structure interview study (Chapter 7). Additionally, the small sample size for some studies, such as the observational audit, may limit the confidence in the findings however the consistency of these findings with those from the semi-structured interviews with Life Education staff suggest this may be limited.

The generalisability of the findings for some studies are further limited due to the eligibility criteria for participants. For example, the effectiveness, observational and teacher survey studies only included government schools. As a result, it is unclear if the findings of these studies would be consistent in Catholic or Independent schools.

Finally, whilst the desktop review study identified that the Life Education Program is designed to be delivered annually from preschool to secondary school, the effectiveness study was limited to assessment of student outcomes in Year 5 students following receipt of one or more relevant drug and alcohol modules. Findings from this study also identified that 16% of schools had annual bookings over the last 5 years for the Year 5 cohort of interest. As a result, the cumulative impact of the Life Education Program as designed was not able to be assessed.

Chapter 1: Background

1. Burden of disease attributed to tobacco, alcohol and other drug use

Tobacco, alcohol and illicit drug use each significantly contribute to the global burden of disease, with negative impacts for both individuals and the society,^{1,2} with tobacco the largest contributor to the global burden of disease of all preventable risk factors.

In Australia, 12% of all deaths were attributed to tobacco use, and tobacco use accounted for 9% of the total burden of disease and injury, as measured by Disability Adjusted Life Years (DALYs) in 2011.³ Alcohol use was estimated to be responsible for 3.2% of all deaths in 2012 in Australia,⁴ and 5.1% of the burden of disease and injury as measured by DALYs in 2011.³ Illicit drug use, defined as the use of illegal drugs, and the misuse, or non-medical use of pharmaceutical drugs, is associated with significant adverse social and health consequences worldwide.⁵ In Australia, illicit drug use was estimated to be responsible for 976 drug-induced deaths in 2007,⁶ and 1.8% of the burden of disease and injury as measured by DALYs in 2011.⁷

Between 2004 and 2005 in Australia, harms arising from the use of tobacco, alcohol use and illicit drugs were estimated to cost \$31.5 billion, \$15.3 billion and \$8.2 billion respectively.⁸

2. Prevalence tobacco, alcohol, and other drug use

Despite a declining trend in some population groups, a significant proportion of Australian adults use tobacco, alcohol and illicit drugs.⁹ In 2014-2015, it was reported that 15% and 17% of Australian adults were daily smokers or drank alcohol at risk of long-term harm (more than two standard drinks per day) respectively.^{9,10} In Australia in 2013, 10% of adults reported use of an illicit drug in the last 12 months.¹⁰ Data from the New South Wales (NSW) Adult Population Health Survey in 2017 showed 10% of adults smoke daily and 31% drank alcohol at levels of risk of long-term harm (more than two standard drinks on a day they consume alcohol).¹¹

Initiation to tobacco, alcohol and illicit drugs typically occurs during adolescence. In Australia, by 16 years of age 28%, 82% and up to 29% of adolescents have smoked a cigarette, consumed an alcoholic drink or used an illegal drug respectively.¹² Within NSW, the most recent data available from the 2014 NSW School Students Health Behaviour Survey, indicated 17%, 65% and 15% of 12 – 17 year old adolescents have smoked a cigarette, consumed an alcoholic

drink or used an illegal drug respectively.¹³ Consistent with trends across Australia, in NSW the rates of smoking (2005: 33%; 2014: 17%) and alcohol consumption (2005: 83%; 2014: 65%) in adolescents over the last 10 years have declined.¹³ A more variable trend is evident in the prevalence of illicit drug use; adolescent use of marijuana use over the past 10 years is stable (2005 and 2014: 15%) compared to adolescent use of inhalants which has declined (2005: 19%; 2014: 15%).¹³

3. Opportunity for prevention

Evidence shows that the earlier the initiation to such substances, the greater risk of ongoing use and long-term health impacts.^{4,5,14,15} Given this, international guidelines recommend the prevention of initiation to tobacco, alcohol and illicit drug use in children as a key strategy in reducing the overall burden of such substances.¹⁶⁻¹⁹

Schools have been identified internationally and in Australia as a key setting for the prevention of initiation to tobacco, alcohol and illicit drug use as they represent an almost universal access point to deliver programs to children.^{3,16-21} A large number of studies have been conducted to examine the effectiveness of school-based substance use prevention programs.²²⁻²⁹ Synthesis of such school-based studies in three Cochrane reviews has found evidence of a significant beneficial effect for specific intervention approaches for specific forms of substance use.^{24,25,28}

For the prevention of tobacco use, a 2013 review of 134 randomised controlled trials reported interventions that combined social competence (aiming to help adolescents to refuse substance use offers) and social influence (aiming to increase adolescents' awareness and skills in identifying and addressing social influences that support substance use) were effective in preventing initiation at both short and long-term follow up, and social competence interventions were effective at long-term follow up only.²⁸ There was no overall effect on change in smoking behaviour over time reported for any intervention approach.²⁸

For the prevention of alcohol use, a 2011 Cochrane review of 53 randomised controlled trials reported results from a narrative synthesis that identified generic psychosocial and

developmental prevention interventions were effective in preventing initiation and misuse of alcohol.²⁵

For the prevention of illicit drug use, a 2014 Cochrane review of 51 controlled studies reported that combined social competence and social influence intervention approach were effective in reducing use of illicit drugs.²⁴

Across these three reviews the potential of social competence, social influence, and some psychosocial approaches for the prevention of adolescent tobacco, alcohol and other drug use is evident, whereas no evidence of effect was found for school-based interventions focused solely on the provision of knowledge.^{24,25,28}

More recently a rapid review brokered by the Sax Institute for the NSW Ministry of Health has been conducted (Healthy Lifestyle Choices in Children).³⁰ The review aimed to synthesise 1) the evidence regarding which risk and protective factors were associated with, and 2) which prevention interventions were effective in addressing, substance use in middle school-aged children (defined as late primary and early secondary school years). Peer-reviewed longitudinal studies of associations between substance use risk and protective factors and substance use (aim 1), and systematic reviews of school-based substance use prevention programs (aim 2), for school-aged children in the middle school years that were published between 2000 and 2016 only were eligible.³⁰

For aim 1, the rapid review identified 6 longitudinal association studies. The identified longitudinal studies reported 31 risk factors (17 individual, 8 family-based, 3 school-based and 3 community) and 10 protective factors (7 individual, 2 family and 1 school) to be associated with substance use for middle school-aged children (Table 1.1).³⁰ The risk and protective factors assessed by the study authors as demonstrating the largest associations (using NHMRC quality of evidence ratings for clinical impact) are shown in Table 1.1.

Table 1.1. Risk and protective factors for substance use in middle school-aged children*

Risk factors	Effect size	Protective factors	Effect size
<i>Individual factors</i>			
Friends' use of drugs	OR 4.91 & OR 2.72	Self-esteem	OR 0.52
Lower initial levels of behavioural control in early childhood	Age of onset of drinking (OR 0.552) Age of first drunkenness (OR 0.58)	Peer rewards for prosocial behaviour	OR 0.77
Sipped alcohol by aged 10	Alcohol OR 1.883	Initial levels of resiliency	Age of onset of first drinking (OR 0.787) Age of onset of first drunkenness (OR 0.710)
<i>Family factors</i>			
Poor family management Family history of antisocial behavior (including drug and alcohol use)	OR 4.37 OR 2.12 & OR 2.06		
Having an alcoholic parent	Drinking by 14 (OR 3.080) Drunkenness by 17 (OR 4.572) Alcohol problem (OR 0.336) Age of onset of drinking (OR 1.791) Age of first drunkenness (OR 2.004)		
<i>School factors</i>			
Low school commitment	OR 1.64 & OR 1.79		
<i>Community factors</i>			
Perceived availability	OR 1.99		

*'Substance use' defined in search terms as 'substance use' or 'alcohol use' or 'drug use'. Table adapted from Healthy Lifestyle Choices in Children rapid review³⁰; NB. Findings presented show large to very large effects as assessed by study authors; OR=odd ratio.

For aim 2, the rapid review identified 12 systematic reviews that assessed the effectiveness of substance use prevention interventions.³⁰ As summarised by the authors, 11 of the included reviews reported substance use prevention interventions to be effective in preventing tobacco, alcohol or substance use, with the exception of one review that reported no effect on alcohol or substance misuse (see Appendix 1.1. for more detail).³⁰

Whilst the types of interventions shown to be effective in the identified reviews were not detailed in the rapid review, the authors described 15 characteristics of effective

interventions in four of the identified reviews published after 2010 according to their targeted developmental processes and intervention components.³⁰ This synthesis did not include the three existing Cochrane reviews regarding the prevention of tobacco, alcohol and illicit substance use.^{24,25,28} The identified characteristics of effective interventions are categorised as those related to the theoretical basis, content, delivery, and dose of intervention in Table 1.2 below.

Table 1.2. Developmental processes targeted and intervention components of effective substance use prevention interventions for middle school-aged children*

Study	Developmental Processes Targeted/Intervention Components of effective substance use interventions	Theoretical basis	Content	Delivery	Dose
Champion et al ³¹	<p><i>Computers or the internet offer an effective platform for school-based alcohol and other drug prevention programs with outcomes evident from 6 months to 34 months. The effective models are based on social development and cognitive behavioural risk process theories. Effective intervention components include normative education, peer resistance skills training, reducing positive expectancies, parenting components, interactive education and the standardisation of implementation. Longer programs were the most effective at between 4 and 12 lessons. The three programs that included booster lessons all showed significant effects.</i></p>	Social development theory	Normative education	Computers/internet delivery	4-12 lessons
Teesson, et al ³²		Cognitive behavioural risk theory	Peer resistance skills training Reducing positive expectancies Parenting components	Interactive education Standardisation of implementation	Booster lessons
Durlak et al ^{33,34}		<p>SEL interventions have measurably higher effects where they <i>avoid implementation problems and conform to quality design features</i> described by the acronym SAFE: Sequenced (clear and coordinated program logic); Active (includes active learning components); Focused (at least one component developing personal or social skills); and Explicit (to SEL skills rather than general skills or positive development). <i>Programs delivered by classroom teachers</i> have more consistent effects compared to those delivered by non-school personnel. Multicomponent programs (e.g. whole of school programs) are not superior to <i>single-component programs</i>, due partly to the <i>simpler implementation challenge</i> for the latter.</p>		Multicomponent programs (e.g. whole of school programs) are not superior to single-component programs, due partly to the simpler implementation challenge for the latter.	SEL interventions have measurably higher effects where they avoid implementation problems and conform to quality design features Programs delivered by classroom teachers have more consistent effects compared to those delivered by non-school personnel.
Onrust et al ³⁵	Substance misuse prevention processes have differential effects at different stages in adolescent development. For <i>primary school students</i> , universal		Universal programs that teach SEL, self-control, problem solving and healthy behaviours (primary)		

programs that *teach SEL skills, self-control and problem solving and healthy behaviours* are the most beneficial. Teaching students about specific substances can be counter-productive as they may attract higher risk students to explore these substances. In *early secondary school* (early adolescence) *SEL skills, social norm strategies and parent programs* are effective, while preparing students to refuse peer pressure is not.

Teaching students about specific substances can be counter-productive as they may attract higher risk students to explore these substances.

SEL skills, social norm strategies and parent programs are effective, while preparing students to refuse peer pressure is not effective (secondary students)

*Table adapted from Healthy Lifestyle Choices in Children rapid review³⁰; NB. SEL=social and emotional learning.

4. Policy context for school-based drug and alcohol prevention in Australia

In Australia, national guidelines recommend schools as a key setting for the prevention of initiation to tobacco, alcohol and other drugs.³⁶ Similarly, the delivery of drug and alcohol school-based education is a priority for the NSW Ministry of Health.³⁷ In NSW, it is mandatory for schools to deliver 'drug education' to students via the NSW Education Standards Authority Personal Development, Health and Physical Education syllabus.^{38,39} Schools have an option of meeting the mandated 'drug education' teaching and learning obligations by engaging external providers to deliver the curriculum content under the Engaging External Providers for Curriculum Implementation Guidelines.⁴⁰ The guidelines specify that the program must align with curriculum requirements, include educational understanding (e.g. will it assist in capacity building of teachers), quality assurance (e.g. do providers have relevant qualifications), and policy and procedures (e.g. alignment with child protection policies and procedures).⁴⁰ Schools are also expected to comply with the NSW Department of Education Controversial Issues in Schools policy.⁴¹ This policy states that school staff are required to manage controversial issues in the curriculum including materials used and views expressed by external providers; ensure materials used within school programs or activities are age appropriate, and sensitive to student needs; and ensure activities delivered by external providers are supervised at all times by teaching staff.⁴¹ As part of the NSW Proficient Teacher Standards, teachers are also required to incorporate differentiated teaching strategies to meet the specific learning needs of students across the full range of abilities.⁴² Differentiated programming involves the use of teaching, learning and assessment strategies that cater for the diversity of learners (e.g. learning styles, preferences, needs) to ensure all students can learn effectively and is integrated within NSW K-10 Syllabus framework.⁴³ Additionally, the NSW government has an expectation that teaching and learning programs generally are evidence-based.⁴⁴

5. Overview of the Life Education Program

One school-based drug and alcohol education program that NSW primary schools can select to meet the requirements of the NSW Education Standards Authority Personal Development, Health and Physical Education syllabus is the Life Education Program.⁴⁵ Briefly, the Life Education Program was established in 1979 by Reverend Ted Noffs at the Wayside Chapel in

Sydney's Kings Cross, NSW Australia.⁴⁵ Life Education reports it is a not-for-profit organisation and the "largest independent health and drug education provider for school children aged 5 - 13 years in Australia".^{46,47}

Life Education reports their mission as "empowering our children and young people to make safer and healthier choices through education".⁴⁶ The stated aims of the Life Education Program are to⁴⁸:

- Build AWARENESS of the general topic or issue(s) being covered;
- Encourage REFLECTION on how the topic or issue affects the students;
- Provide students with the information and KNOWLEDGE that they need to understand and respond to the ideas and / or issue(s) being covered;
- Help students to identify and develop STRATEGIES to apply those ideas and / or respond to those issues; and
- Help students to start to develop the SKILLS and confidence that they need to apply those strategies on a day to day basis.

The Life Education Program is curriculum-based and consists of a series of 16 modules designed for specific age groups covering topics such as tobacco, alcohol and other drugs, body knowledge, personal safety, healthy lifestyle, social skills, relationships, cyber safety, decision making and peer pressure.⁴⁷ In 2018, three modules were available for preschool-aged children, 12 modules for primary school-aged children and one module for secondary school-aged children.⁴⁵ Of the 12 modules designed for primary school-aged children, three focus explicitly on tobacco, alcohol or other drugs: 'On the Case', 'Think Twice' and 'Decisions'.⁴⁵

The Life Education Program was designed so that each school year children would participate in a different educational module, and such cumulative exposure to the Program's modules during the school years would have a lasting effect on intended outcomes.⁴⁹

The Life Education Program is delivered to school students by specially trained Educators via mobile classrooms that travel to schools, and to a lesser extent via other modes, such as static

Life Education centres that students can visit.⁵⁰ A combination of interactive storytelling approaches, digital and interactive tools, skills practice, animated videos and characters, and print-based and online teacher, student and parent resources are used to deliver the Program.⁵¹⁻⁵³ Schools are required to fund the implementation of the Life Education Program in their school (total cost per school not reported), with parents asked to contribute \$10 per child (unless otherwise subsidised).⁵⁴

6. Previous evaluations of the Life Education Program

A search of both peer-reviewed journal articles and grey literature reports was conducted to identify any previous evaluations that reported an outcome related to any aspect of the Life Education Program. Ten previous evaluations were identified, of which nine were conducted in Australia,^{47,49,55-64} and one in New Zealand.⁶⁵ The reports of five studies conducted between 1985 and 1992 in Australia that were referenced in one of the previous evaluations⁵⁸ were not available online nor able to be accessed via library services.^{55,56,59,60,64}

The characteristics and reported outcomes of the four accessible Australian studies are summarised in Table 1.3 (see Appendix 1.2 for more detail). The majority of these studies involved non-controlled study designs (3 of 4), with the exception of one quasi-experimental controlled study. All four studies examined the impact of participation in Life Education modules with drug and alcohol content (albeit various combinations of Life Education modules) on student drug and alcohol outcomes. Two studies reported outcome data from teachers or school coordinators regarding their perceptions of Life Education and use of resources. School level data regarding the frequency of, or number of schools with, Life Education bookings were reported in two studies.

Table 1.3. Previous evaluations of the Life Education Program

Author/year Funder Study type	Population/ setting/ participants	Intervention / Comparator	Outcomes reported
Hawthorne 1992, 1995 & 1996 ^{49,57,58} Funded by Victorian Health Promotion Foundation and Life Education Quasi-experimental controlled trial	86 Victorian Primary Schools Year 6 students (aged 11-12 years): - Intervention=1,721 - Control=1,298	Intervention: exposed to LE program modules over 5 consecutive years Control: conventional school- based drug education curricula NB. Not reported which LE modules students exposed to	Student 'short-term' outcomes: - Tobacco use (ever, last month) - Alcohol use (ever, last month, misuse) - Analgesic use (ever) - Knowledge scores (student level, school level) - Attitudes towards drug use (student level, school level) - Attitudes towards other drug users (student level, school level) NB. Length of follow up not defined ('Short-term') School teacher outcomes: - Receipt of health or drug education - Use of health or drug education curriculum materials - Teaching PDHPE lessons - Attitudes about the LE Program - Use of LE lessons
Regina Hill Effective Consulting 2013- 2014 ^{47,61} Funded by Life Education Australia Cross sectional study	53 Australian Primary Schools (including 8 NSW primary schools): - 13 participated in 'On the Case' - 16 participated in 'Think Twice' 5,178 Kindergarten to Year 7 students: - 468 participated in 'On the Case' - 390 participated in 'Think Twice' 269 school teachers and coordinators: - 16 participated in 'On the Case' - 22 participated in 'Think Twice'	Intervention: participation in one of 10 primary school level LE modules including: - 'On the case' - 'Think Twice' Control: n/a	Student outcomes (assessed by module): - Enjoyment - Learnt something new - Talked to friends/family about session School teacher/ coordinator outcomes: - Linked LE modules to class curriculum - Ran complementary activities before and after LE session - Used LE Used LE resources - School satisfaction School outcomes: - Frequency of LE bookings - Prevalence of annual bookings ≥4 years NB. Outcome data collected 1-2 weeks following LE delivery

Regina Hill Effective Consulting 2015 ⁶²	136 QLD Primary Schools	Intervention: Participation in one of seven LE modules focused on healthy eating, physical activity, smoking, alcohol (mis)use, puberty and sexual health modules including:	Student outcomes (assessed by module):
Funded by LEA	8,658 Year 4-6 students: - 2,310 participated in 'On the Case'	- 'On the Case'	- Knowledge of harms/effect on body from smoking (pre/post)
Non-controlled pre-post study	- 1,570 participated in 'Think Twice'	- 'Think Twice'	- Knowledge of harms/effect on body from alcohol (pre/post)
		Control: n/a	- Awareness of smoking use in adolescents (pre/post)
			- Awareness of alcohol use in adolescents (pre/post)
			- Intentions to smoke in future (pre/post)
			- Thought more about smoking/alcohol effect on people they knew
			- Strategies if offered cigarette/ alcoholic drink
			- More/less likely to smoke/drink based on LE learnings
			- Intentions to make safer decisions about alcohol in future
			NB. Outcomes data collected immediately before/after LE module
Regina Hill Effective Consulting 2017 ⁶³	5 QLD Primary Schools	Intervention: Participation in 'All Systems Go' or 'On the Case'	Student outcomes:
Funded by LE QLD	- 3 schools participated in 'On the Case'	Control: n/a	- Knowledge about smoking harms (pre/post)
Non-controlled pre-post study	381 Year 4-6 (10-13 years) students: - 224 participated in 'On the Case''		- Awareness of smoking in adolescents (pre/post)
	19 school teachers: - 11 teachers participated in 'On the Case'		- Intentions to smoke in the future (pre/post)
			- Previous LE attendance
			- Pre-existing knowledge
			- Pre-existing behaviour intention
			- Learnt something new/improved awareness understanding of healthy behaviour/avoidance of risk factors
			- Whether LE session:
			o Increased awareness
			o Encouraged reflection on topic/issue
			o Provide knowledge on ideas/issues
			o Helped develop skills/confidence
			Teacher outcomes:
			- Relevance, quality and contribution of LE to their class
			- Effectiveness of LE program for their class
			- Previous experience with LE
			School outcomes:
			- Number of QLD schools implemented 'On the Case' in 2016
			NB. Outcome data collected before and 6 weeks following LE visit

***Bolded text** indicates where significant effect reported; NB. LE=Life Education; LEA=Life Education Australia; NSW=New South Wales, QLD=Queensland; PDHPE= Personal Development, Health and Physical Education.

The only study that examined student tobacco and alcohol use outcomes, a quasi-randomised controlled study in 86 Victorian primary schools (3,019 students) in 1995, found Year 6 students who participated in the Life Education Program were more likely to have smoked and consumed alcohol compared to those who participated in usual school-based drug education curricula.⁴⁹ The same quasi-randomised study found students who had participated in the Life Education Program had higher knowledge scores, higher attitudes score towards drug use (i.e. more negative attitudes towards using drugs), and lower attitudes score towards other drug users (i.e. less negative attitudes towards other drug users).⁵⁸

Two non-controlled pre-post studies examined student knowledge, awareness of adolescent use and intentions to smoke and drink alcohol in the future before and after participation in the Life Education modules 'On the Case' and 'Think Twice'.^{62,63} Significant increases from pre to post-test were reported in both studies for knowledge about tobacco (<1%-27%⁶²; 1%-23%⁶³) and in awareness of the correct proportion of 12-17 year old's that have never smoked (14%-64%⁶²; 9%-21%⁶³). No significant differences pre to post-test were reported in either study for intentions to smoke in the future (79%-85%⁶²; 72%-78%⁶³). A number of other student outcomes have been assessed either post-test only or via cross sectional surveys, including student perceptions of having learnt something new, improved tobacco or alcohol refusal skills, or their perceived change in intentions to smoke or drink in the future following participation in 'On the Case' or 'Think Twice'.^{47,61-63} No previous evaluations were identified that have reported the impact of participation in the 'Decisions' module on student outcomes.

Teacher use drug education curricula materials and teaching of drug education was assessed in the above mentioned quasi-experimental study. Teachers from schools where the Life Education Program was delivered were significantly more likely to report teaching drug education than those from usual curricula schools, however no differences between groups were found in use of drug education curricula materials.⁴⁹ Cross sectional surveys of school teachers and coordinators have been conducted in two previous studies to assess use, school satisfaction, relevance, and perceived effectiveness of the Life Education 'On the Case' and 'Think Twice' modules and related resources.^{47,58,61,63} Generally, these studies report the majority of school teachers and coordinators use Life Education resources, link Life Education

modules to their class curriculum, perceive the Life Education modules to be delivered to a high standard, and believe the Life Education modules are effective in improving knowledge.^{47,61,63} No previous evaluations of school teacher and coordinator use or perceptions of the 'Decisions' module were identified.

Data regarding the frequency of school Life Education bookings was reported in one national study.^{47,61} Authors reported 70% of the study schools booked Life Education modules annually for their students, of which 58% had done so for at least the last 4 years.^{47,61} Life Education Program reach of the 'On the Case' module across Queensland (QLD) was reported in another study; 252 schools and 13,456 students receiving the module in 2016.⁶³ No previous evaluations were identified that assessed the uptake, population reach or booking format of Life Education modules in NSW schools.

Additionally, no previous reports were identified that compared the delivery of the Life Education modules by Educators to the manuals Life Education develops for each module, the costs or cost effectiveness of the Life Education Program either overall or specifically for drug and alcohol focused modules, or perceptions of the delivery of the Life Education Program by Life Education staff responsible for its delivery.

7. Aims of the evaluation

A pragmatic, real world evaluation was conducted, with a primary purpose:

'to identify whether the Life Education Program has achieved its intended outcomes as it is currently implemented, and to identify areas for program improvement by describing the Life Education Program, how it is implemented state-wide including program reach, and to assess the effectiveness of the Program in changing student knowledge and intentions'.

The stated objectives of the evaluation, of which some aspects related to the overall Life Education Program in NSW and others related to primary school modules with drug and alcohol content, were to:

Objective 1: Describe the Life Education Program model and how it is implemented in NSW schools;

Objective 2: Assess the population reach and school uptake of the Life Education Program in NSW in 2017/2018;

Objective 3: Investigate the short-term impacts of the Life Education Program on Year 5 students including:

- Intentions to use tobacco, alcohol and other drugs in the future;
- Awareness of, knowledge of, attitudes towards and skills in avoiding tobacco, alcohol and other drug use;

Objective 4: Document the costs associated with delivery of the Life Education Program in NSW in 2017/2018.

To address these objectives, a mixed methods evaluation approach was conducted between February 2018 and July 2019 which involved quantitative and qualitative studies; pre-post, controlled and post-test only study designs; and the collection of retrospective and prospective data. The study design and methods for each study was based on what was considered to be the most appropriate design for the specific aims and research question of each study, and feasibility in the context of being conducted during routine delivery of the Program in schools. The Chapters and studies that contribute to each of the evaluation objectives are summarised in Table 1.4 below.

Table 1.4. Alignment between evaluation objectives and studies

	Chapter 2 Content, delivery, population reach and school uptake of the Life Education Program in NSW	Chapter 3 Short-term effectiveness of participation in Life Education drug and alcohol modules on Year 5 student outcomes	Chapter 4 Economic evaluation of the delivery of the Life Education Program in NSW in 2017/2018	Chapter 5 Observation of delivery of Life Education drug and alcohol modules in NSW primary schools	Chapter 6 School teacher use and perceptions of the Life Education Program and resources	Chapter 7 Life Education staff perceptions of the delivery of the Life Education Program in NSW
Objectives						
Objective 1 Describe the Life Education Program model and how it is implemented within NSW schools	Desktop review of available documentation (public documents and those provided by Life Education NSW)			Observational audit of the delivery of Life Education drug and alcohol modules to Year 5 students	Cross-sectional survey of Year 5 school teachers in schools with Life Education drug and alcohol module bookings	Semi-structured interviews with Life Education NSW administrators and educators
Objective 2 Assess the population reach and school uptake of the Life Education Program in 2017/2018	Desktop review of available data from Life Education NSW					
Objective 3 Investigate the short-term impacts of the Life Education Program in Year 5 student drug and alcohol outcome		Wait-list controlled pre-post study in NSW government schools involving Year 5 students				
Objective 4 Document the costs associated with delivery of the Life Education Program in NSW in 2017/2018			Retrospective, trial-based economic evaluation of the Life Education Program delivery in Year 5 students			

NB. NSW=New South Wales.

8. Context of the evaluation

The delivery of the Life Education Program in NSW is supported in part by funding from the NSW Ministry of Health. Following an open, competitive, public tender selection process, the NSW Ministry of Health commissioned researchers from the University of Newcastle to undertake the evaluation of the Life Education Program in NSW (Appendix 1.3 tender documentation and final contract). The Centre for Population Health, Ministry of Health, coordinated the evaluation, in collaboration with the Ministry's Centre for Epidemiology and Evidence.

An evaluation framework was developed by the University of Newcastle researchers in consultation with a Ministry of Health-chaired evaluation advisory group at the commencement of the project to document the research protocol for the project (Appendix 1.4). The evaluation advisory group included representatives from the NSW Ministry of Health and the NSW Department of Education. All research tools and methods were approved by the evaluation advisory group prior to implementation.

Approval to conduct the studies within this evaluation was provided by the University of Newcastle Human Research Ethics Committee (Approval H-2017-0293) and the NSW Education Department where studies involved participation of school staff or students (State Education Research Approval Process SERAP 2017488).

9. Structure of the report

The following Chapters 2 to 7 of the report describe the aims, methods and results for each of the studies conducted to address the four overarching evaluation objectives (with several of the studies providing data to address multiple evaluation objectives). Each Chapter outlines which objectives the study addresses and are presented in the structured format of a research article, resulting in some repetition of information. Similarly, the data for a number of the studies were collected in a manner integrated with, or linked to, each other resulting in a repetition of some information.

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Chapter 2: Content, delivery, population reach and school uptake of the Life Education Program in NSW

Introduction

No previous synthesis of information could be identified regarding the Life Education Program and the way that it is currently implemented within New South Wales (NSW); how the Program aligns to best practice approaches for school-based substance use prevention programs; or the population reach and school uptake of the Program in NSW. Such information is important for providing a context for observed program effects and stakeholder views and their interpretation.

Aims

A study was conducted to:

1. Describe the Program history, vision, target group, objectives, aims, content, and delivery in NSW;
2. Compare the Life Education Program content and model of delivery in NSW to the characteristics of best-practice school education approaches for reducing risk-taking behaviours and promoting healthy decision-making; and
3. Assess the Life Education Programs' population reach and school uptake across NSW in 2017/18.

Methods

Design

A desktop review of existing Program documentation and administrative data relating to Life Education NSW was conducted.

Data collection procedure

A multistage search strategy was conducted to source both publicly available and internal Life Education Program documentation and administrative data regarding the Program and its delivery in NSW. The first stage involved searches of the Life Education website and Google using the following search terms: Life Education, Life Education Program, Healthy Harold, New South Wales/NSW, Australia, substance prevention, and Drug and Alcohol program(s). The second stage involved requests to Life Education NSW (via the NSW Ministry of Health) for information that was not publicly available.

Data synthesis

Descriptive statistics were used to describe the number and sources of identified documents. The content of identified documents was reviewed, and relevant information extracted and synthesised narratively for Aims 1, 2, and 3 of the chapter.

For Aim 2, information received was compared to the current NSW primary school Personal Development, Health and Physical Education syllabus,¹⁻³ and to the findings of a recent rapid review regarding the characteristics of effective substance use interventions for middle school-aged children.⁴

For Aim 3, the demographic characteristics of primary schools with a Life Education Program booked in 2017/18 financial year was compared to all primary schools in NSW, with the demographic characteristics of the latter sourced from the NSW Department of Education⁵ and Australian Curriculum, Assessment and Reporting Authority websites (2017 data).⁶ School postcode, sourced from the Department of Education NSW Master Dataset,⁵ was used to calculate the socio-economic index scores⁷ and remoteness of location index scores of schools with program bookings, the latter provided by Life Education NSW.

Results

The multistage search identified 57 relevant documents, of which 40 were publicly available and 17 were provided by Life Education (Appendix 2.1). Publicly available documents included parent resources, publications and media, and links to the Personal Development, Health and Physical Education syllabus. Documents provided by Life Education included Educator manuals, teacher manuals and resources, and student workbooks. Additional information that was not available in existing documents was also requested and provided by Life Education, including information regarding program development, parent/carer information sessions, and ongoing teacher support, reach and uptake data of the Life Education Program in the 2017/18 financial year, website access data in 2017/18 financial year, and information about the existing Life Education evaluation surveys.

1. Life Education Program history, vision, target group, objectives, aims, content, and delivery in NSW

1.1. History of Life Education

Based on the Chicago Health Education Centre programmes, Life Education was developed to delay experimentation with or initiation of smoking, drinking and unnecessary analgesic use by educating school children aged 5 to 12 years.⁸ The Life Education Program was designed so that each school year children would participate in a different educational module and that such cumulative exposure to program modules during the school years would have a lasting effect on intended outcomes.⁸

1.2. Life Education vision, target group, aims and objectives

Life Education's vision is to have "generations of healthy young Australians living to their full potential" achieved by "empowering our children and young people to make safer and healthier choices through education".⁹

The stated objective of the Life Education Program is to contribute to the health and wellbeing of children and young people with the aim of helping them to develop the awareness, knowledge, confidence and skills that they need to make more informed, safer and healthier choices.¹⁰ Specifically, the Life Education Program aims to move students around the Life Education 'Learning Circle' (Figure 2.1) and aims to address the following student outcomes¹⁰:

- Build AWARENESS of the general topic or issue(s) being covered;
- Encourage REFLECTION on how the topic or issue(s) affects the students;
- Provide students with the information and KNOWLEDGE that they need to understand and respond to the ideas and/or issue(s) being covered;
- Help students to identify and develop STRATEGIES to apply those ideas and/or respond to those issues; and
- Help students to start to develop the SKILLS and confidence that they need to apply those strategies on a day to day basis.

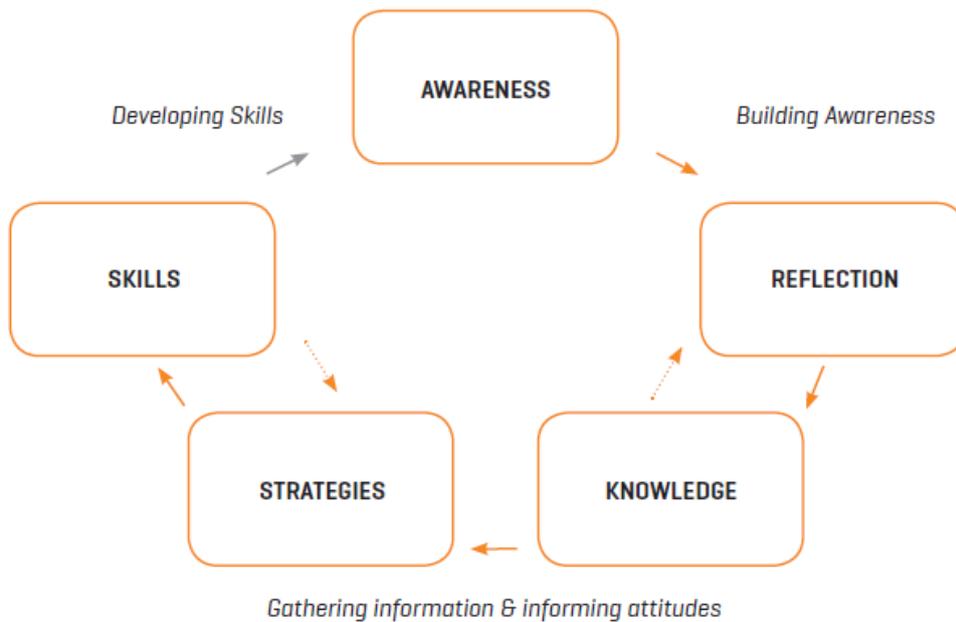


Figure 2.1. Life Education Learning circle¹⁰

To achieve its vision and objective, Life Education reports that it provides a curriculum-based educational program to school students aged 3-15 years.¹¹ The Program is designed to be delivered as an integral part of school drug and health education^{10,12-15} and delivered to small class groups at least once a year, every year, from preschool through to secondary school.¹⁶

1.3. Life Education modules

Sixteen Life Education modules are currently available for schools to select across a range of learning areas which are designed to provide age appropriate content, relevant to each stage of student development (early childhood, middle childhood, adolescence) (Figure 2.2).^{11,17} Life Education works with schools to identify which module is most appropriate for each class.¹⁰ All sessions involve face-to-face delivery of modules, plus resources for teachers (including pre-visit and post-visit activities), parents and students.¹⁸ Although Life Education recommends students be exposed to the Life Education Program annually, it is up to schools to decide if individual modules are delivered annually, or as one-off modules.¹⁹



Figure 2.2. Life Education Program content across the school years^{10,20}

1.3.1. Available modules by age group

Preschool modules

There are three preschool modules: ‘Harold’s Summer Holiday’, ‘Harold’s Healthy Play Day’ and ‘Harold’s Thankful Heart’ (Appendix 2.2).¹⁷ Of those, one preschool module (‘Harold’s Summer Holiday’) includes drug and alcohol content (Table 2.1).

Primary school modules

There are 12 modules for primary school students (Kindergarten to Year 6, aged 5 to 12 years) (Appendix 2.2).¹⁷ Of those, five primary school modules (‘All Systems Go’, ‘Mind Your Medicine’, ‘On the Case’, ‘Think Twice’, ‘Decisions’) include drug and alcohol content (Table 2.1).¹⁷

Table 2.1. Life Education modules with drug and alcohol content¹⁷

Module	Year	Content
Harold's Summer Holiday	Preschool	Explore the importance of road safety, sun safety, water safety and safety around medicines.
All Systems Go	2-4	<ul style="list-style-type: none"> • Peer Pressure • Second hand smoking • Safety with medicines • Factors that influence the function of body systems
Mind Your Medicine	3-4	<ul style="list-style-type: none"> • Factors that can contribute to a person's sense of self-worth • Dimensions of health such as physical, social, emotional and environmental • Effective communication as an essential component of maintaining positive relationships • Medicines as drugs and the consequences of their misuse
On the Case	5-6	<ul style="list-style-type: none"> • What's in a cigarette • Effects of smoking • History and laws • Myths and facts • Influences and pressures • Strategies to reduce harm
Think Twice	5-6	<ul style="list-style-type: none"> • Myths and facts surrounding the use of alcohol • Strategies for responding to encouragement or pressure to drink • Physical, social & legal consequences of alcohol use • Strategies to reduce harmful effects of alcohol on self and other
Decisions	5-7	<ul style="list-style-type: none"> • What is a drug and how drugs are classified • Effects of drugs on the body • Analysing health messages about drugs in the media • Messages around non-use – normative data – dispelling myths • Influences on decision making – family, peers, media, culture, financial, legal
Face the Facts	7-10	<ul style="list-style-type: none"> • Strategies and skills to be safe • Focuses on tobacco, alcohol, cannabis and legal/illegal drugs • Influences, myths and facts • Short- and long-term consequences • Ways to stay safe • Skills in problem and decision making and laws

Secondary school modules

One module, 'Face the Facts' is available for students in secondary school which focuses on tobacco, alcohol, cannabis, legal and illegal drugs (Table 2.1).¹⁷

1.3.2. *Modules with tobacco, alcohol or other drug content for Year 5 students*

Of the seven modules that include tobacco, alcohol or other drug content (Table 2.1), three are designed for Year 5 students: 'On the Case' (Years 5 to 6), 'Think Twice' (Years 5 to 6), and 'Decisions' (Years 5 to 7) and are a focus of this evaluation.¹⁷

On the Case

The Life Education module 'On the Case' includes content related to tobacco.¹² The module was developed in 2013/14 and first implemented in 2014.¹² The module has a focus on tobacco, with the following stated student learning outcomes¹²:

- Recognition that people are responsible for the decisions that they make in relation to smoking and the effect that it has on others;
- Identification that nicotine and chemicals in cigarette smoke can affect the whole body;
- Identification of the personal, social and environmental consequences associated with smoking;
- Identification of the laws governing the advertising, sale and use of tobacco;
- Identification of strategies to address public influences and pressures to smoke;
- Practices strategies to address public influences and pressures to smoke;
- Identifies strategies to reduce harms related to smoking e.g. second-hand smoking; and
- Practices strategies to reduce harms related to smoking e.g. second-hand smoking.

Think Twice

The Life Education module 'Think Twice' includes content related to alcohol, with the following stated student learning outcomes¹⁴:

- Recognition that people are responsible for the decisions that they make in relation to alcohol and the effect that it has on others;
- Identification that alcohol is a legal drug which can affect all body systems resulting in short- and long-term consequences;
- Identification of the harmful effects that drinking alcohol can have on the community;
- Identification of services that advise, educate and inform people of the facts about drinking alcohol;
- Identification of the laws governing the advertising, sale and use of alcohol product; and
- Identification and demonstration of strategies to reduce alcohol related harms.

Decisions

The Life Education module 'Decisions' includes content related to tobacco, alcohol, prescription drugs and other drugs was first implemented in 2017.¹³ The module has a focus on decision making regarding social and health (drug related) issues students may face, with the following stated student learning outcomes¹³:

- Recognition that the responsibility for the health and safety of themselves and others;
- Identification of the physical, social, financial and legal consequences of legal/illegal drug use;
- Identification of the factors that influence their health and behaviour e.g. media, advertising, family, friends, laws;
- Description of the laws governing the advertising, sale and use of a variety of legal and illegal drugs;
- Identification of government and community strategies that educate and inform people about how to maintain healthy and safe lifestyles e.g. campaigns, product labelling;
- Identification of services or support networks where people/young people can seek help; and
- Identification and demonstration of strategies to deal with unsafe situations and social dilemmas.

1.3.3. *Program logic, theory, development and teaching methods*

Program logic

The Life Education Program logic model as reported by Life Education is provided below (Figure 2.3).

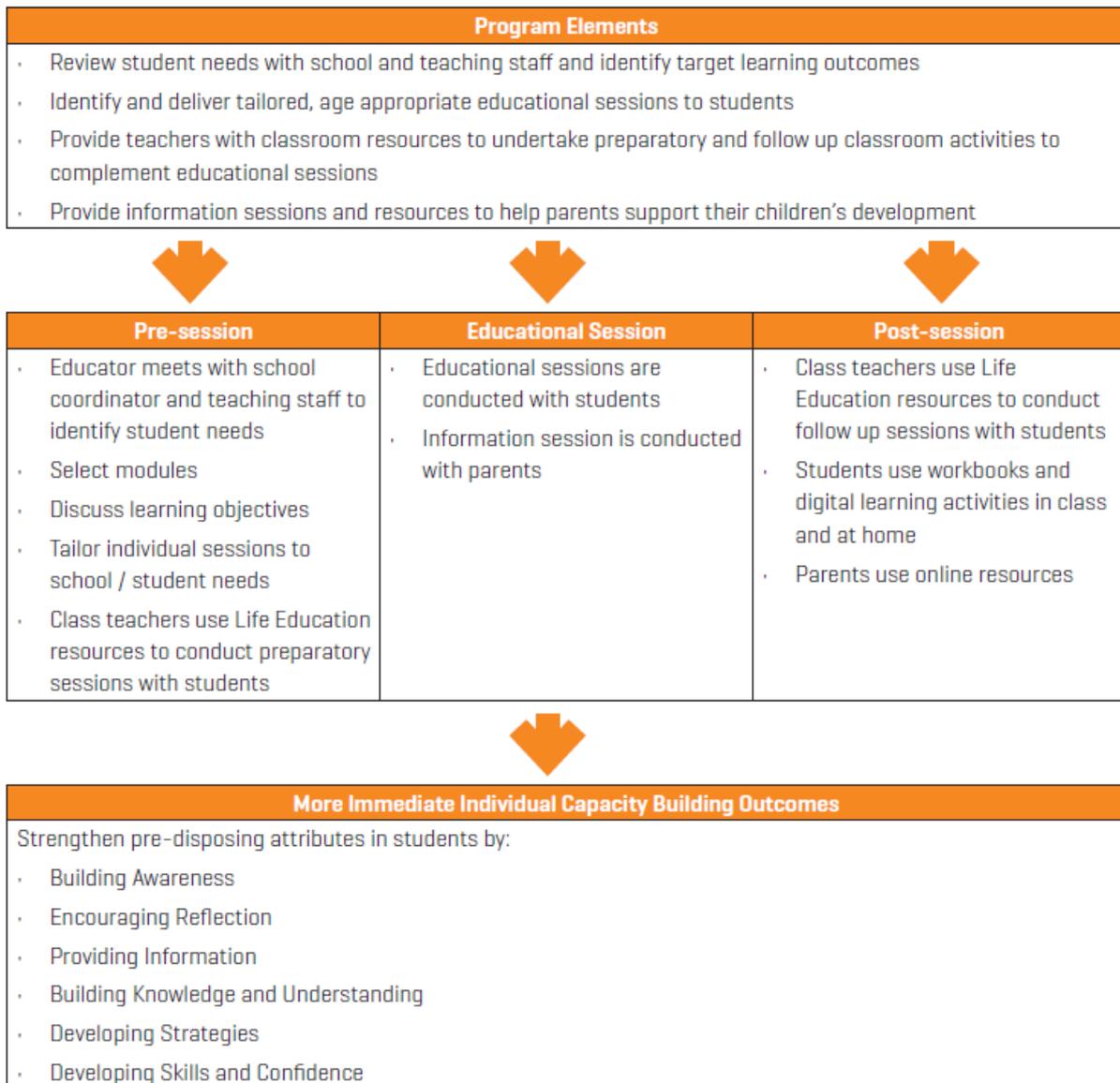


Figure 2.3. Life Education Program logic model¹⁰

Program theory

No information was available within the desktop review regarding the specific theory that the Life Education Program was originally based on. A Life Education commissioned review of the theoretical and design principles underpinning the Program, and how it aligned to key principles described within the Australian Best Practice guidelines of school drug education, was conducted by Erebus International in 2017.²¹ The theory or hypothesis underpinning the Life Education Program was reported to be “based on the assumption that if students are provided with knowledge and helped to develop predisposing attributes that enhance their capacity to make safer and healthier choices, they will then exercise these choices, leading to

positive behaviours that lead to improved health and wellbeing”.²¹ The review reported the Life Education Program, as a whole, was consistent with a number of motivational and behavioural theories including Bandura’s social learning theory, Bronfenbrenner’s ecological framework for human development, Ajzen’s Theory of Planned Behaviour, and Reasoned Action Theory.²¹ The Life Education Program was additionally reported overall to be strongly aligned to the four key themes of the Australian Best Practice guidelines of school drug education (key themes: comprehensive and evidence-based practice; positive school climate and relationships; targeted to needs and context; effective pedagogy).²²

Program development

The process for how Life Education Program modules are developed was reported by Life Education to include:

- Determine Life Education learning outcomes and content descriptions for the module and alignment with the Australian Curriculum;
- Establish Project Team and Reference Group and identify references sources to support content development;
- Brief and engage development partners with the capacity to develop resources for Educators, teachers, student and parents;
- Content development workshop with agency and working group;
- Development of the content and assets and ongoing consultancy, testing and feedback with Life Education, developers, content experts, teachers, students, lead Educators; and
- Development of related training materials and face to face training of Educators.

An example of this process and how it was applied to the ‘Decisions’ module is described in detail in Appendix 2.3.²³

Life Education teaching methods

The teaching methods reported by Life Education that are applied in drug and alcohol module delivery are described in Appendix 2.4.²³ In summary, these methods are as follows:

- Cater for individual differences within each group in terms of teaching approaches, learning materials and props;
- Modify the session to reflect the sensitivities to meet needs of target group;
- Utilise active and interactive strategies in program delivery;
- Utilise strategies such as role play for students to construct their knowledge to convey it to others;
- Engage students in reflective activities to apply knowledge; and
- Demonstrate the use of and purpose of puppets/Harold for each module.

1.4. Life Education NSW Program delivery

1.4.1. Governance structures and processes

Life Education Australia is a not-for-profit registered company and acts as the National Office for the companies that comprise the Life Education Group.^{24,25} Life Education Australia is governed by a board of directors, including members from each of the Affiliated Member organisations Life Education NSW/Australia Capital Territory, Life Education Victoria/Tasmania, Life Education Queensland, Life Education South Australia, Life Education Western Australia and Life Education Northern Territory (Figure 2.4).^{24,26} The responsibilities of Life Education Australia are stated to include the development of the Life Education Program, including for each module, its contents, teacher resources, student workbook and the parent resources.²⁵ Life Education Australia is also responsible for quality assurance and program evaluation activities, national marketing and partnership activities.²⁵

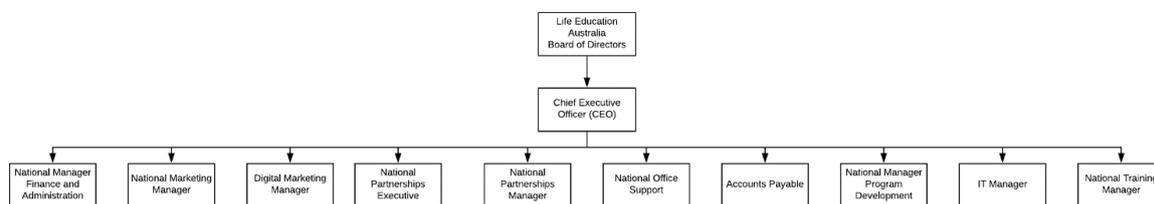


Figure 2.4. Life Education Australia 2016 Organisation Chart²⁶

Affiliate member organisations are responsible for delivering Life Education in the following jurisdictions: NSW/Australia Capital Territory, Victoria/Tasmania, Queensland, South Australia, Western Australia and Northern Territory.²⁵ The affiliate member organisations,

including Life Education NSW, are responsible for employing Educators to deliver the Life Education Program, developing and maintaining mobile classrooms, promoting the Program to schools, and overseeing its delivery in their respective jurisdictions.²⁵

Life Education NSW is governed by a volunteer board responsible for the strategic direction of Life Education NSW (Figure 2.5).²³

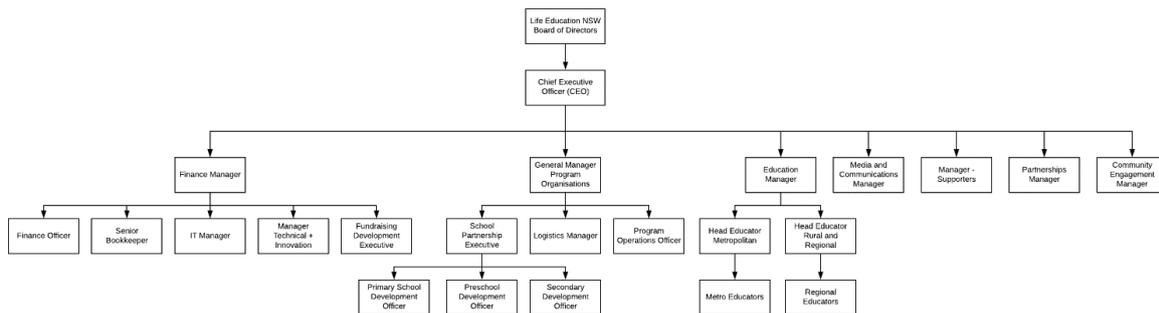


Figure 2.5. Life Education NSW Organisation Chart²³

1.4.2. Funding and income sources

Nationally, Life Education Australia receives funding and support from various sources including Australian Government grants, fees for service from schools (which can include contribution from parents), sponsorships, donations and fundraising (Table 2.2).²⁵ The delivery of Life Education in NSW is also funded by the NSW Ministry of Health, other Government agencies, school fees, and donations to Life Education (Table 2.2).^{23,25,27} In the 2017/2018 financial year Life Education Australia received over \$17 million,²⁵ and Life Education NSW received over \$6 million in funding (Table 2.2).²³

Table 2.2. Sources of national Life Education Australia and Life Education NSW funding in 2017/2018^{23,25,27}

Source	Description	2017/2018 Funding, \$ (%)
Life Education Australia		
Grants	Not available	\$4,902,000 (28%)
Affiliation fees	A fee determined by the Board from time to time which is payable to the Company by an Affiliated Member ⁷⁴	\$303,000 (2%)
School fees	Not available	\$5,483,000 (31%)
Other revenue/income	Not available	\$283,000 (2%)
Sponsorships, Donations and Fundraising	<ul style="list-style-type: none"> Business partnerships e.g. iSelect, bioisland, educational experience, Hyundai Help for Kids, Stuart Alexander, Yates, Fresh Food Kids. Pro-bono support from Allens Arthur Robinson, Grant Thornton. Life Education Foundation* 	\$6,836,000 (38%)
TOTAL Life Education Australia funding 2017/2018		\$17,907,000
Life Education NSW		
Grants	NSW Ministry of Health and other government agencies	\$2,500,000
School fees	Not available	Not available
Other revenue/income	Not available	Not available
Sponsorships, Donations and Fundraising	<ul style="list-style-type: none"> NSW partnerships e.g. ClubsNSW, Parramatta Eels, Hyundai Help for Kids, CMOC-Northparkes, Nortcott, Aussie Farmers Foundation, Holiday Coast Credit Union, Liverpool City Council, Newcastle Permanent Charitable Foundation, bhpbilliton, iSelect, and Woolworths Fresh Food Kids 	\$650,000
TOTAL Life Education NSW funding 2017/2018		\$6,120,000

*The Foundation is registered as a charity with the Australian Charities and Not-for-profits Commission¹¹ and is governed by the Directors of the Trustee;¹⁰ NB. NSW=New South Wales.

1.4.3. *Delivery of Life Education in NSW*

The following strategies are used by Life Education NSW to facilitate the delivery of the Life Education Program in NSW primary schools.

Pre-visit support

Life Education Educators consult with schools regarding booking dates, which modules will be selected for which class, and the mode of Life Education session delivery.²³ They also provide schools with a school coordinator pack which includes information regarding cost per student, resources available for students, teachers and parents (including log on details for online pre and post-visit support materials), school newsletters, parent permission procedures (if

required by school), and an information sheet for parents about Harold merchandise and making donations to Life Education (see Appendix 2.5 for an example coordinator pack).¹⁸

Class needs analysis

To ensure the module content is appropriate, and to maximise student understanding and learning, Life Education Educators assess the needs of the students and teachers with schools before sessions are delivered.^{18,28-30} The Life Education Educator assesses whether there are any special requirements for special needs classes or if any changes to the agreed outcomes of modules are required per class/or by stage (Appendix 2.6 for an example class needs analysis).^{18,28-30}

Delivery of Life Education session

Educators deliver selected Life Education modules to classes of students. Schools can select which mode of Life Education delivery is suitable for their school, either Life Education mobile classrooms, Life Education static classrooms, via the School of the Air and more recently via inflatable dome-shaped pop-up classrooms (launched in 2017).²⁷ As part of program delivery, a school staff member, preferably the class teacher, must be present during the delivery of each session.¹⁸

Life Education resources

Several resources have been developed to support the delivery of the Program, including resources for Life Education Educators, teachers, parents and students. The resources are designed to¹²⁻¹⁴:

- Complement, enhance and integrate with other lessons by school teachers and school drug and health programs;
- Support partnerships between Life Education and schools;
- Focus on positive relationships, nutrition, body knowledge and healthy living environments;
- Incorporate personal and social skills appropriate to the risk of harm and protective factors (e.g. communication, assertiveness, positive social interaction and problem solving);

- Utilise inclusive and interactive teaching techniques such as role play, discussion and small group activities; and
- Use strategies sensitive to the gender, social and cultural backgrounds of the young people participating, delivered in a respectful, inclusive and supportive learning environment.

Resources for Life Education Educators

All Life Education Educators are provided with materials, resources and a Life Education Educator manual for delivering each Life Education module via a support CD and/or access to an online system.¹²⁻¹⁴ Each manual includes background information, the learning outcomes for the module and how these link to the Australian curriculum for Personal Development, Health and Physical Education, example learning activities, audio visual and digital resources for activities, teaching strategies, and guidelines for writing, preparing and delivering a session.¹²⁻¹⁴

Life Education indicates that the manuals are the:

*“starting points to implement modules. Educators are encouraged to adapt them and to include relevant existing activities to meet the content of this module and the needs of students.”*¹²⁻¹⁴

Resources for schools and teachers

Teachers are provided with resources including pre-visit and post-visit interactive activities and lesson plans to use with students and supplement Life Education session delivery; information regarding the alignment between Life Education modules and the current (K-6) and new (K-10) NSW Personal Development, Health and Physical Education syllabuses; and access to online teacher support materials and resources.^{12-14,23}

Resources for parents

All schools are offered the opportunity to hold a pre or post-visit parent information session¹⁸ to reiterate to parents what their child will learn/has learnt during their Life Education session.²³ Parents are also provided information links to a range of audio visual and additional print-based information available on the ‘Parent Hub’ (the parent section of Life Education

website). Information regarding a mobile app related to the ‘On the Case’ module is also provided for use with children at home. Parents are also provided information regarding Life Education social media platforms such as Facebook, to receive regular program news and tips.²³

Resources for students

Students are provided a student workbook after the Life Education session which includes learning activities that relate to post-visit teacher sample lesson plans and interactive activities.¹²⁻¹⁴ Students also receive access information to relevant interactive digital games for the ‘On the Case’ module.^{12,18}

1.5. Standards for Program delivery and monitoring

Life Education Australia is responsible for national quality assurance and program evaluation activities including those undertaken in NSW.²⁵ It is reported by Life Education that quality assurance and program evaluation activities involve Teacher and School Coordinator surveys that assess: student experience and learning outcomes; teacher perception of the Life Education Program; and school satisfaction (school coordinator) (Table 2.3).^{11,23,31} Life Education NSW reported that 145 (8%) school coordinators and 267 (31%) teachers in NSW completed the surveys in 2017/18 financial year.²³

Table 2.3. Evaluation toolset^{11,31}

Student experience and learning outcomes	Teacher perception of the LE program	School satisfaction
<ul style="list-style-type: none"> • Students’ enjoyment of the LE session • Their recollection of key module content and the alignment of that to the Learning Cycle • Participation in post-session activities or discussions with family or friends likely to reinforce and consolidate learning from the session 	<ul style="list-style-type: none"> • Teachers’ perception of the content, structure and delivery of LE sessions and their effectiveness as awareness building and learning sessions • The way that the session was used to complement the class curriculum • The use and appropriateness of Les Teacher and Student Resources • Perceived benefits associated with the program 	<ul style="list-style-type: none"> • General attitudes towards and satisfaction with the LE program

NB. LE=Life Education.

No student or parent data collection or monitoring activities are currently undertaken in NSW, however student evaluation surveys are reported to be under development for implementation in 2019.²³

2. Comparison of Life Education to NSW Department of Education syllabus and best-practice approaches for school-based drug prevention programs

2.1. Alignment of Life Education drug and alcohol modules to NSW Personal Development, Health and Physical Education syllabus

A review was undertaken by Life Education of the 'On the Case', 'Think Twice' and 'Decisions' modules, relative to the current (K-6) and new (K-10) NSW Personal Development, Health and Physical Education syllabuses.¹⁻³ Based on this review, the modules were reported by Life Education NSW to be aligned to 9 of the 13 relevant Stage 3 outcomes (i.e. Years 5 and 6) of the current NSW syllabus and to all 11 relevant Stage 3 outcomes of the new syllabus.¹⁻³

2.2. Alignment of Life Education program to characteristics of substance use prevention interventions for middle school-aged children

The characteristics of effective school-based substance use prevention programs as proposed in a rapid review of interventions to reduce substance misuse in middle school-aged children⁴ are categorised in Table 2.4 below. Information from Life Education documents obtained via the desktop review relative to these characteristics was extracted and is summarised in Table 2.4 (see Appendix 2.7 for more detail). On the basis of the extracted information, it appears the Life Education Program in NSW is aligned to seven, partially aligned to five, and not aligned with two such characteristics of effective substance use interventions. Insufficient information was available to assess alignment to one proposed characteristic ('Conforms to quality design features').

Table 2.4. Alignment of Life Education drug and alcohol modules to characteristics of effective substance use prevention interventions in middle school-aged children

Characteristics of effective interventions	Evidence of LE overall program, or drug and alcohol module alignment
THEORY	
Intervention based on developmental process theories**	<ul style="list-style-type: none"> - No LE evidence available regarding the theory the LE program is developed on. - A theoretical review of the LE program as a whole reported it was highly consistent with Bandura’s social learning theory, Bronfenbrenner’s ecological framework for human development, Ajzen’s Theory of Planned Behaviour, Reasoned Action Theory.⁷¹ - ‘On the Case’, ‘Think Twice’ and ‘Decisions’ LE educator manuals list learning outcomes/activities that appear consistent with aspects of school-based substance use prevention models: social competence, social influence, education-focused.⁴⁸⁻⁵⁰
CONTENT	
Normative education*	<ul style="list-style-type: none"> - ‘On the Case’, ‘Think Twice’ and ‘Decisions’ Educator manuals list prevalence of drug and alcohol use of adolescents as learning outcomes.⁴⁸⁻⁵⁰
Peer resistance skills training*	<ul style="list-style-type: none"> - ‘On the Case’, ‘Think Twice’ and ‘Decisions’ Educator manuals include activities to provide children with peer resistance skills training.⁴⁸⁻⁵⁰
Reducing positive expectancies*	<ul style="list-style-type: none"> - ‘On the Case’, ‘Think Twice’ and ‘Decisions’ Educator manuals include discussion on why people choose to smoke/drink/use drugs and negative effects of substance use.⁴⁸⁻⁵⁰
Involve parenting components/programs*	<ul style="list-style-type: none"> - LE reports schools are encouraged to conduct parent information sessions about what their child will/has learnt during LE session.⁷³ - LE reports parents are provided information regarding topics covered in LE session and links to audio visual/resources via LE website.⁴⁸⁻⁵⁰
Multicomponent are not superior to single-component programs**	<ul style="list-style-type: none"> - The LE program is a curriculum-based program which includes classroom activities for teachers to implement with students.^{44,48-50} - LE reports schools are encouraged to conduct parent information sessions, and parents are provided LE information/resource.^{44,48-50}
Universal programs that teach social-emotional learning skills, self-control, problem solving, healthy behaviours*	<ul style="list-style-type: none"> - Whilst not reported by LE, the suggested delivery of LE modules to all classes and Year groups in a school, is consistent with definitions of a universal prevention program.⁸⁰ - ‘On the Case’, ‘Think Twice’ and ‘Decisions’ Educator manuals list learning outcomes describing social-emotional skills, self-control, problem solving and healthy behaviours.⁴⁸⁻⁵⁰
SEL skills, social norm strategies*	<ul style="list-style-type: none"> - ‘On the Case’, ‘Think Twice’ and ‘Decisions’ Educator manuals list learning outcomes describing social-emotional skills, self-control, problem solving and healthy behaviours.⁴⁸⁻⁵⁰ - ‘On the Case’, ‘Think Twice’ and ‘Decisions’ Educator manuals list prevalence of drug and alcohol use of adolescents as learning outcomes.⁴⁸⁻⁵⁰
Not focused on specific substances***	<ul style="list-style-type: none"> - On the Case’, ‘Think Twice’ and ‘Decisions’ Educator manuals list learning outcomes related to tobacco, alcohol, illegal drugs.⁴⁸⁻⁵⁰
DELIVERY/MODE	
Use computer and on-line delivery**	<ul style="list-style-type: none"> - ‘On the Case’, ‘Think Twice’ and ‘Decisions’ Educator manuals list digital tools to support student learning including digital interactive activities, animations, and videos during LE visit, interactive digital games (mobile apps).⁴⁸⁻⁵⁰
Interactive education*	<ul style="list-style-type: none"> - ‘On the Case’, ‘Think Twice’ and ‘Decisions’ Educator manuals list digital and hands on interactive activities to use with students.⁴⁸⁻⁵⁰
Standardisation of implementation**	<ul style="list-style-type: none"> - ‘On the Case’, ‘Think Twice’, and ‘Decisions’ Educator manuals are available.⁴⁸⁻⁵⁰ - No other information available via the desktop review regarding standards for the implementation of Life Education program in NSW.

Conform to quality design features****	-	No evidence was available via the desktop review regarding whether the LE program in NSW aligns to quality design features.
Delivered by classroom teachers***	-	'On the Case', 'Think Twice' and 'Decisions' modules are delivered by LE Educators. LE request a teacher is present during the LE session. LE provides teachers with activities to implement with their students pre and post the LE visit. ⁴⁸⁻⁵⁰

DOSE

Use longer programs and booster sessions**	-	Different LE modules are designed to be delivered to students once per year for each schooling year (preschool to secondary school). ^{43,46}
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*Aligned, **partially aligned, ***not aligned, ****no evidence regarding alignment; NB. LE=Life Education; LEA=Life Education Australia.

3. Life Education Program population reach and school uptake across NSW, 2017/18

3.1. School reach and uptake of the Life Education Program in NSW

There were 2,411 primary schools in NSW in 2017,^{5,6} of which Life Education reported it delivered the Life Education Program to 1,195 (50%) in the 2017/18 financial year.²³ NSW school demographic characteristics are reported in Table 2.5, as are the characteristics of schools that had a booked Life Education session in 2017/2018. Schools with a booked program session were generally similar to primary schools in NSW, with the exception of schools' size (booked schools: 65% small schools; NSW 54% small schools) and remoteness (booked schools 48% major cities; NSW 56% major cities) (Table 2.5).

Table 2.5. Demographics of all primary schools that booked Life Education Program in NSW 2017/18 financial year compared to all primary schools in NSW in 2017^a

School Demographics	Primary schools Booked Life Education Program (N=1195)	All primary schools in NSW (N=2411)
	n (%)	
School size		
Small (<300)	774 (65)	1302 (54)
Large (≥300)	421 (35)	1109 (46)
SEIFA		
Lower (≤990)	588 (49)	1234 (51)
Higher (>990)	607 (51)	1177 (49)
Remoteness		
Major Cities	570 (48)	1355 (56)
Inner Regional	373 (31)	669 (28)
Outer Regional	227 (19)	344 (14)
Remote/Very Remote	25 (2)	43 (2)
Organisation Type		
Combined	10 (1)	240 (10)
Primary	1179 (99)	2129 (88)
Special	6 (<1)	42 (2)
School Authority Major Group		
Catholic	150 (12)	438 (18)
Independent	198 (17)	383 (16)
Public	847 (71)	1590 (66)
Aboriginal and/or Torres Strait Islander per school, mean %	6.6 ^b	6.1 ^c
LBOTE per school, mean %	27.8 ^d	33.3 ^e

^an (%) reported unless otherwise specified; ^b27 schools missing Aboriginal and/or Torres Strait Islander status; ^c484 schools missing Aboriginal and/or Torres Strait Islander status; ^d47 schools missing LBOTE; ^e305 schools missing LBOTE; NB. NSW=New South Wales, SEIFA=Socio-Economic Indexes for Areas; LBOTE=Language Background Other Than English.

Data received from Life Education showed there were 305,675 students enrolled at the 1195 primary schools that booked a Life Education Program in NSW in the 2017/18 financial year (Table 2.6). Of these, 260,432 (85%) attended a Life Education session (63,675 were Year 5 students, 24%). Of the 12,795 sessions delivered across all Year groups, 2,966 sessions (23%) were for Year 5 students. Of the sessions delivered to Year 5 students, 504 (17%) were for 'On the Case' (11,070 students), 297 (10%) were for 'Think Twice' (6,652 students), and 857 (29%) were for 'Decisions' (18,357 students). The majority (89%) of the Life Education sessions were delivered via mobile classrooms in schools. The total number of hours spent delivering Life Education sessions (including parent information sessions) was 6,511 hours. Across all modules, there were 224 parent information sessions held and 3,051 parents attended.

Table 2.6. Characteristics of primary schools that booked a Life Education module in NSW in the 2017/18 financial year, n=1195^a

Characteristics	n
Number of student	
All Year groups	305,675
All Year groups attending Life Education	260,432
Year 5 students attending Life Education	63,675
Number of sessions delivered	
All Year groups	12,795
Year 5 students	2966
Number of sessions delivered per Year 5 program, n (%)	
On the Case	504 (17)
Think Twice	297 (10)
Decisions	857 (29)
It's Your Call	525 (18)
Relate Respect Connect	783 (26)
Number of students attending each Year 5 program, n (%)	
On the Case	11,070 (17)
Think Twice	6652 (10)
Decisions	18,357 (29)
It's Your Call	11,251 (18)
Relate Respect Connect	16,345 (26)
Delivery Type, n (%)	
Direct Delivery at school	33 (3)
Hosted at other school ^b	53 (4)
Static classroom	45 (4)
Mobile classroom at school	1064 (89)
Total number of teaching hours	6,511
Total number of parent sessions held	224
Total number of parents attended	3051

^an reported unless otherwise specified; ^b'Hosted at other school' means that two or more schools have combined to receive the Life Education program in the same setting and may include van or direct delivery; NB. The number of Year 5 students at each participating school was not available; NSW=New South Wales

3.2. National Life Education website usage

All data regarding the usage of the Australian national website in the 2017/18 financial year was provided by Life Education NSW.²³ In 2018, the Life Education website underwent a re-design, impacting on the completeness of data collection in that year.

3.2.1. Usage of teacher section of Life Education website

During the 2017/18 financial year there were 17,550 visitors to the main teacher's access page (30,934 page views) (Table 2.7). There were 3,808 new teacher registrations and 941 booking enquiries. By module, for 'On the Case', 'Think Twice, and 'Decisions' the number of visitors ranged from 770 to 1,753 visitors (1,339 to 2,804 page views) of the module overview page and the number of teacher logins ranged from 157 to 545 (Table 2.7). On average

teachers spent 1.36 to 1.48 minutes logged in (based on login data for ‘Decisions’ and ‘Think Twice’).

Table 2.7. Teacher website usage data

Page / URL	Visitors	Page views
Accessed Teachers section of website https://www.lifeeducation.org.au/teachers/	17,550	30,934
On the Case brief overview https://www.lifeeducation.org.au/teachers/on-the-case/	1,088	1,712
Number of teacher logins to access On the Case https://www.lifeeducation.org.au/teacher-resources/otc/	514	630
Think Twice brief overview https://www.lifeeducation.org.au/teachers/think-twice	770	1,339
Number of teacher logins to access Think Twice https://www.lifeeducation.org.au/teacher-resources/tt/	157	243
Decisions brief overview https://www.lifeeducation.org.au/teachers/decisions	1,753	2,804
Teacher logins to access Decisions https://www.lifeeducation.org.au/teacher-resources/dec/	545	964

3.2.2. Usage of parent section of Life Education website

There were 94 booking enquiries from parents during the 2017/2018 financial year via the booking enquiry function on the Life Education website. Within the parent section of the website, there were 49,905 visitors to the Life Education Program overview page (73,528 page views) and 9,249 visits to the primary school programs page (13,498 page views).

The number of visitors to the ‘On the Case’, ‘Think Twice’, and ‘Decisions’ parent overview pages ranged from 54 to 1,206 in 2017/18 (98 to 1,262 page views) (Table 2.8). The average time on the ‘Decisions’ page was 2.2 minutes and parent resources were downloaded 21 times. There were 2,674 downloads of the ‘On the Case’ mobile app. The number of the ‘On the Case’, ‘Think Twice, and ‘Decisions’ related YouTube videos views ranged from 120 to 931 (average time viewing ranged from 0.9 to 1.4 minutes (Table 2.9).

Table 2.8. Parent website usage data

Page / URL	Visitors	Page views
Accessed parent section for Life Education overview https://www.lifeeducation.org.au/our-program	49,905	73,528
Accessed overview of primary school programs https://www.lifeeducation.org.au/our-program/primary	9,249	13,498
On the Case overview https://www.lifeeducation.org.au/parents/on-the-case	1206	630
Think Twice overview https://www.lifeeducation.org.au/parents/think-twice	54	98
Decisions brief overview https://www.lifeeducation.org.au/parents/decisions	669	1,262

Table 2.9. Parent YouTube video usage data

YouTube videos	Watch time (minutes)	Views	Average view (minutes)
YouTube video watched for parents On the Case module	339	372	0.9
Alcohol – what choice will YOU make’ YouTube video	160	120	1.3
Decisions YouTube video playlist	1,314	931	1.4

Summary

This chapter aimed to describe the Life Education Program content, manner of its delivery, and the extent of the Programs’ reach in terms of school and student uptake in 2017/2018.

Information obtained via the desktop review identified the Life Education Program is a curriculum-based program consisting of 16 age appropriate modules that are delivered to children aged 3 to 15 years.^{11,17} Of the 16 Life Education Program modules, three modules are designed for Year 5 students that involve content addressing tobacco, alcohol or other drug use: ‘On the Case’, ‘Think Twice’, ‘Decisions’.¹⁷ Life Education recommends students are exposed annually to a Life Education module, however schools decide the frequency of Life Education bookings, which modules are selected for which Year groups, and how to fund the implementation of the Life Education Program in their school.^{16,19}

Life Education NSW utilises a number of strategies in the delivery of the Life Education Program in NSW primary schools including pre-visit support in module selection and provision of Educator, school and teacher, parent and student resources.^{12-14,18,23} Life Education NSW Educators are provided with training and Educator manuals for each of the modules, and

quality assurance and program evaluation activities involving Teacher and School Coordinator surveys.²³

The Life Education Program as a whole has been reported to be consistent with a number of appropriate theories²¹ and the Year 5 Life Education drug and alcohol modules have been reported to align with the NSW Personal Development, Health and Physical Education curriculum.¹⁻³ On the basis of information accessed via the desktop review, the Year 5 Life Education drug and alcohol modules were assessed as aligning to approximately half (7 of 15) of the characteristics of effective substance use prevention interventions for middle school-aged children reported in a recent rapid review.⁴

In 2017/2018 the Life Education Program was delivered in 50% of NSW primary schools to 260,432 primary school-aged children, of which 63,375 were Year 5 students. The 'Decisions' module was most frequently delivered to Year 5 students (29%), followed by 'On the Case' (17%) and 'Think Twice' (10%).²³

Strengths of the study include: the multistage search which was successful in identifying both publicly available and internal Life Education documents; and comparison of the Life Education Program content and delivery strategies to current mandated curriculum and existing evidence-based approaches to education and substance use prevention programs.

The study findings are limited to the availability of documents or information. Additionally, the review methods did not include provision of findings to Life Education NSW to confirm accuracy of the synthesised information. Finally, the comparison of the Life Education Program and its delivery in NSW to suggested characteristics of effective substance use prevention interventions was limited to those characteristics identified by the rapid review. Assessment of how the Life Education Program and delivery in NSW aligns to evidence from other systematic reviews, including three existing school-based Cochrane reviews for tobacco, alcohol and illicit drug use prevention was not undertaken.

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**Chapter 3: Short-term effectiveness of participation in Life
Education drug and alcohol modules on Year 5 student outcomes**

Introduction

A number of previous evaluations of the Life Education Program have assessed the impact of participation in drug and alcohol modules on student tobacco and alcohol use, intentions to use in the future, knowledge and awareness of norms using a variety of evaluation designs. Such studies have reported a variable pattern of results across student outcomes including negative, positive and no effects of participation in the Life Education Program.

One quasi-experimental study reported a negative effect of participation in the Life Education Program on student tobacco and alcohol use. The study found students who participated in the Life Education Program to be more likely to have smoked or consumed alcohol than control group students.¹

Two non-controlled pre-post studies have reported a positive effect of participation in Life Education 'On the Case' and 'Think Twice'. Both studies reported significant increases in student tobacco and alcohol knowledge and awareness of norms, however neither found any positive effects on student intentions to smoke in the future.^{2,3}

Student perceptions of having learnt something new, or were less likely to use tobacco or alcohol in the future as a result of attending a Life Education session, have been also reported in post-test only and cross sectional studies.²⁻⁵

No previous evaluations were identified that have reported the impact of participation in the 'Decisions' module on student outcomes.

Aims

To investigate the immediate and short-term effectiveness of participation in one or more Life Education drug and alcohol modules in Year 5 students. Specifically, the study sought to assess the effectiveness of the Life Education drug and alcohol modules on Year 5 students':

- Intentions to use tobacco, alcohol or other drugs in the future (primary outcome);
- Awareness of norms (i.e. prevalence) of tobacco, alcohol or other drugs use in adolescents (secondary outcome);
- Knowledge related to tobacco, alcohol or other drugs (secondary outcome);

- Confidence to avoid using tobacco, alcohol or other drugs (secondary outcome); and
- A range of exploratory, contextual and impact measures.

Sensitivity analyses of the primary outcome analyses were undertaken, as were per protocol analyses assessing the effect of cumulative participation in the Life Education Program in the previous 5 years, and subgroup analyses assessing the differential effect of participation in Life Education modules according to student risk and protective factor characteristics was conducted on the primary outcome.

Methods

Study design and setting

A wait-list controlled pre-post study was conducted in government primary schools in New South Wales (NSW) that had a Life Education booking in 2018. Baseline and follow up outcome data were collected from a cohort of Year 5 students attending participating intervention and control schools. The study was implemented in the context of the routine delivery of the Life Education Program, with no experimental manipulation of the content, delivery, allocation, or scheduling of the Life Education Program.

Participants and recruitment

Schools

Eligible intervention and control schools were primary schools with a Life Education booking for one or more of the following three Life Education modules available in 2018 that included content related to tobacco, alcohol and/or other drugs for Year 5 students:

- 'On the Case' (focused on tobacco);
- 'Think Twice' (focused on alcohol);
- 'Decisions' (focused on tobacco, alcohol, prescription and other drugs).

To be eligible, the mode of delivery for the Life Education module had to be either via the mobile learning classroom or a static Life Education centre. Each school was required to have three or more Year 5 students enrolled. Catholic, independent, special and central schools were not eligible to participate.

Separate sampling approaches were used to recruit schools to intervention and control groups. Eligible intervention schools were those with a Life Education NSW booking for one of the three eligible modules for Year 5 students in Term 2 2018 (n=201). Eligible control schools were those with a Life Education NSW booking for any Life Education module for Year 5 students in Term 4 2018 (n=123). School booking information and contact details were provided by Life Education NSW for all government schools who had a Life Education booking during Terms 2 and 4, 2018 (n=324). Schools were not blind to allocation to intervention and control groups.

Prior to sampling, all eligible intervention and control schools were stratified according to their number of enrolments, geographic location, and socioeconomic disadvantage and then sorted into a random order with the aim of achieving a representative sample of schools (using SAS 9.3 through the SURVEYSELECT procedure).⁶ Data regarding school enrolment numbers for each school were sourced from the Department of Education NSW Master Dataset⁷ and schools were categorised as either a small school (less than 300 enrolments) or a large school (300 or greater enrolments). School geographic location categorisation was determined by school postcode using the Australian Bureau of Statistics Australian Statistical Geography Standard.⁸ School Socioeconomic disadvantage categorisation was calculated using the Australian Bureau of Statistics Socio-Economic Indexes.⁸

The recruitment of schools involved dissemination of an information pack including an information statement and consent form. One week following this, non-responding principals were contacted to confirm eligibility and to prompt their decision regarding participation. If a school declined consent, the next school on the list was invited until the required quota of schools was achieved.

Written signed consent was sought from the principal of each participating school to contact a school liaison and Aboriginal Education Officer regarding the process for obtaining parental consent for student participation and student data collection. With consent from the principal, the school Aboriginal Education Officer or another nominated Aboriginal representative was contacted by an Aboriginal research staff member to provide information about the study. This strategy was adopted respecting the connection of the Aboriginal

Education Officer or equivalent, to the families and carers of the students to ensure Aboriginal families were fully informed about the research.

Students

All Year 5 students (typically 10 to 11 years of age) in classes that had a Life Education booking at the participating government primary schools were eligible to participate. Active parental consent for student participation was sought via dissemination of an information pack which included a detailed information statement, a consent form and a reply-paid envelope. The information letter included contact details of study investigators and an Aboriginal member of the research team who could be contacted for more information. Two weeks following distribution of the information pack to parents, non-responding parents were followed up via telephone by Department of Education or school staff. A free call number was listed on the information statement for parents to decline the telephone prompt. Parents and students were not blind to intervention and control group allocation.

Data collection procedure

Participating Year 5 students at intervention and control schools completed confidential paper surveys during class time. Intervention students completed 3 surveys: the baseline survey immediately prior to attending their Life Education session (Terms 2/3); an immediate follow up survey immediately following their Life Education session (Terms 2/3); and a 6 month follow up survey (Term 4). Control students completed 2 surveys: the baseline survey (Term 2/3) and the 6 month follow up survey (Term 4) prior to participating in their booked 2018 Life Education session (Figure 3.1).

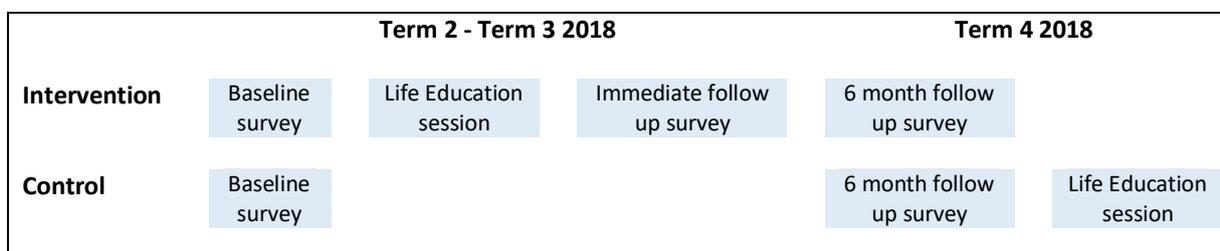


Figure 3.1. Student data collection schedule by group

Research staff were employed to travel to each of the participating schools and administer the survey during class time. As per the Department of Education duty of care, all research staff were required to have a current Working with Children Check, and a school teacher was required to be present whilst students completed the survey.

Measures

The survey items were sourced from various sources including previous evaluations of Life Education or developed by the research team in consultation with the Ministry of Health and the evaluation advisory group (Appendix 3.1: Student survey items). Life Education NSW were invited to review the survey items that assessed knowledge of tobacco, alcohol and other drug use and provided confirmation of their alignment with current program content. The student survey was piloted in a sample of Year 5 students in non-study schools prior to use and some minor wording modifications were made to improve the understanding and readability of the survey items prior to the implementation of the baseline student survey.

School and student demographic characteristics

School demographic characteristics: postcode and school size were sourced from the Department of Education NSW Master Dataset.⁷ Student demographic characteristics (age, gender and language background other than English) were measured at baseline. Student residence postcode was sourced as part of the parental consent process.

All primary and secondary outcome measures were included in the baseline, immediate and 6 month follow up surveys (Table 3.1). Exploratory, contextual, and impact measures were only included in specific surveys (Table 3.1).

Table 3.1. Student survey measures across study groups and follow up time points

Survey measures	Baseline survey		Immediate Follow up	6 month follow up	
	Int	Cont	Int	Int	Cont
Primary outcome					
Intentions	✓	✓	✓	✓	✓
Secondary outcomes					
Awareness	✓	✓	✓	✓	✓
Knowledge	✓	✓	✓	✓	✓
Confidence to avoid	✓	✓	✓	✓	✓
Exploratory measures					
Risk and protective factors	✓	✓		✓	✓
Contextual measures					
Previous exposure to drug and alcohol lessons at school in 2018	✓	✓		✓	✓
Previously attended a LE session	✓	✓			✓
LE student resources used	✓	✓		✓	
Impact measures					
Change in awareness, knowledge, skills and confidence to avoid after attending LE			✓		
Change in future intentions based on the information received during LE session				✓	
Intentions to discuss what they've learnt during LE session (smoking and alcohol only)			✓		
Discussed what they've learnt during LE session (smoking and alcohol only)				✓	

NB. Int=Intervention; Cont=Control; LE=Life Education.

Program effectiveness

Primary outcome

Intentions regarding use of tobacco, alcohol and other drugs in the future were measured by items sourced from a survey used in a previous evaluation of the Life Education Program.²

Secondary outcomes

- Awareness

Awareness of norms (i.e. prevalence of) tobacco, alcohol or other drugs in adolescents were assessed using items from the previous Queensland Evaluation that asked about the prevalence of drug use in 12-17 year olds.²

- Knowledge

Knowledge related to tobacco, alcohol or other drugs (i.e. legality, physical and social effects) was assessed using items from the Queensland Evaluation.²

- Confidence to avoid

Confidence to avoid using tobacco, alcohol or other drug use was measured using an item from the California Healthy Kids Survey for elementary students.⁹ The item assessed how easy it would be to refuse a drug if it was offered by a friend.

Exploratory measures

- Risk factors for tobacco, alcohol and other drug use

Risk factors reported to have strong associations with initiation of tobacco, alcohol and other drug use, and deemed appropriate by the evaluation advisory group to be asked of Year 5 students before and after delivery of the module, were included in the survey.¹⁰ Risk factors included the risk of mental health problems^{10,11} and drug use by parents/carers, siblings or peers.^{10,12} The three subscales from the Strengths and Difficulties Questionnaire¹¹ were selected to measure risk of mental health problems: conduct problems (5 items), hyperactivity issues (5 items), and relationships with peers (5 items).¹³ Use of tobacco or alcohol by parents/carers, siblings or friends was assessed based on items from a previous study.¹²

- Protective factors for tobacco, alcohol and other drug use

To assess level of protective factors before and after Life Education, student protective factor items were included from six internal and environmental factor subscales and a scholastic competence item from the California Healthy Kids Survey Resilience and Youth Development module.^{9,10} Given the similarity in items and in consideration of keeping the student survey a feasible length, the items for the family, school and community connection subscales were combined to focus on an adult in any of those settings e.g. 'At home, at school or in the community there is an adult who wants me to do my best'. Scholastic competence asked students how well they did their schoolwork.

Contextual measures

- Previous exposure to drug and alcohol lessons

Students in both groups were asked at baseline and 6 month follow up whether they had received any lessons or parts of lessons regarding tobacco, alcohol or other drugs during 2018 or attended a Life Education session previously.

- Use of Life Education student resources

Intervention students were asked to record which Life Education resources they had previously used, including Life Education website, mobile app, student workbook, or completion of a Life Education activity with a parent or lesson with a teacher.

Impact measures

- Student-perceived changes in awareness, knowledge, skills, confidence to avoid and intentions regarding tobacco, alcohol and other drugs after attending Life Education (intervention group only).

Following participation in the Life Education session, students in the intervention group were asked if felt they knew more about the effects of smoking/alcohol/illegal drug use than before the Life Education session and how much the Life Education session helped to change their awareness and knowledge regarding: the physical and social effects of drug use; why people use legal and illegal drugs; and the legality of drug use. Students were also asked how much the Life Education session helped to change their skills to avoid second-hand smoke, refuse an offer of drug use and confidence in making their decision to avoid drug use as well as whether the information provided in the Life Education session made them more or less likely to smoke cigarettes, drink alcohol and use illegal drugs in the future.

- Discussion of what students learnt during Life Education session with someone at home (intervention group only)

At immediate follow up students were asked whether they intended to discuss what they had learnt during the Life Education session about tobacco and alcohol with someone at home. At 6 month follow up students were asked whether they had discussed what they had learnt during the Life Education session about tobacco and alcohol with someone at home.

Sample size

It was estimated that consent to participate would be obtained for 70% of students. Based on this, at an estimated 50 Year 5 students per school, and a sample of 30 participating schools (15 intervention, 15 control) it was estimated that a total of 1,050 Year 5 students would participate in the survey at baseline and 945 would participate at follow up (10% attrition over 6 months). Assuming 80% power, a 0.05 significance level, an intra-cluster correlation of 0.01,¹⁴ and a conservative estimate of Year 5 control group prevalence of 50% for all primary outcome measures, it was estimated the study would be able to detect an absolute reduction in prevalence of intention to use tobacco, alcohol and drug use of 10% in intervention compared to control students.

Analysis

School and student demographic characteristics

School and student demographic characteristics are reported using descriptive characteristics. Differential loss to follow up between intervention and controlled groups was examined using logistic regression analyses that accounted for clustering of schools. Examination of differences between intervention and control students at baseline were undertaken using simple chi-square analyses for demographic characteristics and logistic regression adjusting for clustering for primary and secondary outcomes

Primary and secondary outcomes

Primary outcome: Intentions

The response options for future intentions to smoke cigarettes, drink alcohol or use an illegal drug were dichotomised as either never ('I will never') or may use drugs ('I probably will...'/ 'I probably won't...'/ 'I don't know').

Secondary outcomes

- Awareness

The responses to each of the tobacco, alcohol or other drugs awareness items regarding the prevalence of drug use in 12-17 years olds were dichotomised as 'correct response' or 'incorrect response'.

- Knowledge

Knowledge scores were calculated by adding the number of correct responses ('true' vs. 'false') for each of the tobacco, alcohol and other drugs items. Scores ranged from 0 to 5, with higher scores indicating greater knowledge.

- Confidence to avoid drug use

The response options for confidence to avoid using tobacco, alcohol or other drugs were dichotomised as either confident ('easy'/'very easy') or not confident ('very hard'/'hard'/'don't know').

Analysis of effect

Comparison between groups in the prevalence of student-reported primary and secondary outcomes at immediate follow up (intervention immediate follow up vs. control baseline) and 6 month follow up (intervention 6 month follow up vs. control 6 month follow up) was undertaken to determine the effectiveness of the intervention. Generalised linear mixed models were developed (binomial distribution with a logit link) for categorical variables and linear mixed models for continuous variables. All models included a fixed effect for treatment group (intervention versus control), time (baseline, immediate follow up, and 6 month follow up), a treatment by time interaction, and nested random effects with school as the first level to account for potential clustering of responses and student as the second level to account for repeated measures. Variables for gender, socioeconomic disadvantage score, and remoteness were also included in the model as potential confounders.¹⁵ Odd ratios or mean differences with 95% Wald confidence intervals were calculated. A criterion for statistical significance of $p \leq 0.01$ was used for all analyses to account for multiple testing.¹⁶ All analyses were conducted using SAS software V9.3.⁶

Sensitivity analyses of the primary outcome

Three sensitivity analyses were undertaken to examine the impact on the primary outcome of intentions to use tobacco, alcohol and other drugs in the future as below:

1. The primary analysis was repeated for the cohort of students who completed both the baseline and 6-month follow up.

2. To examine the impact of receiving previous drug and alcohol related curricula during class in 2018, the primary analysis was repeated by additionally adjusting for previous drug and alcohol lesson exposure in that year. The variable for previous drug and alcohol lesson exposure was created by dichotomising the student response options for “have you had any lessons or parts of lessons at school that were about smoking cigarettes this year (2018)?” as either yes (‘yes, more than one lesson’/‘yes, one lesson’/‘yes, part of a lesson’) or no (‘no, not even part of a lesson’/‘don’t know’) at baseline and 6 month follow up. Previous drug and alcohol lesson exposure was considered if students were categorised as ‘yes’ at baseline and/or 6 month follow up.
3. To examine the impact on student’s intentions for smoking, alcohol consumption and drug use regardless of what drug and alcohol module was received during the intervention period, the primary analysis was repeated to include all drug and alcohol modules.

Per protocol analysis of the primary outcome

To examine any effects of cumulative participation in the Life Education Program in the previous 5 years, a per protocol analysis was conducted comparing subsets of cumulative school-level participation for intervention students with control students. Three variables were created to represent school-level cumulative participation in Life Education module delivery over the last 5 years for the Year group of interest:

1. Number of years a Life Education module was delivered to the Year group of interest (i.e. Year 4 booking in 2017, Year 3 booking in 2016, Year 2 booking in 2015, Year 1 booking in 2014, Kindergarten booking in 2013; high participation dosage ≥ 4 years);
2. Number of Life Education modules targeting drug and alcohol received (high participation dosage ≥ 4 drug and alcohol modules); and
3. Total number of Life Education modules schools received (high participation dosage ≥ 4 Life Education modules).

For each primary outcome, models consistent with the primary analysis were run, where the intervention schools were categorised according to cumulative participation and compared to all participants in the control group.

Subgroup analysis of the primary outcome

To assess any differential impact of participating in Life Education modules on the primary outcomes by student risk and protective factor characteristics, a subgroup analysis was conducted in subgroups defined by overall presence of risk factors for drug use. An overall risk factor score was calculated for tobacco use (maximum score 11), alcohol use (maximum score 11) and other drug use (maximum score 8) by summing presence of each risk factor and absence of each protective factor.¹⁷ Each overall risk factor score was then categorised as low (≤ 2) or high (≥ 3) (based on median score for each overall risk factor score). Best practice principles for subgroup analysis were adopted whereby analysis by formal statistical tests of interactions and analysis within subgroups were conducted only if an interaction was statistically significant.^{18,19} As such, comparisons between intervention and control groups for each primary outcome by each of the three subgroups was undertaken using the same modelling approach as per the primary analysis, to determine the effectiveness of the intervention using models consistent with the main analysis, including an additional three-way interaction of treatment by time by subgroup fixed effect. A significant interaction term was considered to indicate a differential intervention effect.

Exploratory measures

Risk factors for tobacco, alcohol and other drug use

The response options for the 15 items measuring risk of mental health problems were categorised as not true ('no, never'), somewhat true ('yes, some of the time'/'yes, most of the time'), and certainly true ('yes, all of the time'). Each item in the three subscales were scored 0 to 2. The total score for each of the three subscales was calculated by summing the individual points for each item within the subscale. The presence of a risk for conduct problems was defined as a score of 5 points or above, for hyperactivity 7 points or above and for peer problems 4 points or above. A subscale score was not calculated if 2 or more individual items within each subscale were missing. Scores for drug use by parents/carers, siblings or peers were calculated by summing the number of people reported in the student's life that smoked or consumed alcohol. Scores ranged from 0 to 3 for both smoking and alcohol consumption, respectively. Student risk factor characteristics are reported using descriptive characteristics.

Protective factors for tobacco, alcohol and other drug use

Each item in the four subscales (13 items) measuring individual and environmental factors were scored 1 to 4. The four subscale scores were calculated by averaging the responses to all items in each subscale. Presence of protective factor for each subscale was defined as a score of 3 points or greater. A subscale score was not calculated if 2 or more individual items within each subscale were missing, except for pro-social peers which wasn't calculated if any item was missing as there are only 2 items total that make up this subscale. The response options for scholastic competence were dichotomised as either high level of scholastic competence ('I'm one of the best students'/'I do better than most students') or low level of scholastic competence ('I do about the same as others'/'I don't do as well as most others'). Student protective factor characteristics are reported using descriptive characteristics and a combination of generalised linear mixed models (binomial distribution with a logit link) and linear mixed models used to determine intervention effectiveness consistent with the modelling approach for the primary and secondary outcomes.

Contextual measure

The response options for previous exposure to drug and alcohol education in 2018 were dichotomised as either yes ('yes, more than one lesson'/'yes, one lesson'/'yes, part of a lesson') or no ('no, not even part of a lesson'/'don't know/not sure'). The response options for attending a Life Education session previously were dichotomised as yes ('yes') or no ('no'/'don't know'). Previous exposure to drug and alcohol education and Life Education student resource use are reported using descriptive statistics.

Impact measures

Student perceptions regarding awareness, knowledge, skills confidence to avoid and intentions regarding tobacco, alcohol and other drugs following participation in a Life Education session and discussion of what students learnt during the Life Education session with someone at home are reported using descriptive statistics.

Results

Sample

Schools

A number of issues arose during recruitment of schools that required the sampling frame for intervention schools to be extended. First, there was a lower than expected proportion of schools selecting the modules of interest in terms 2 to 4 in 2018 (11% compared to 17% in terms 2 to 4 2017). Second, significant delays were experienced in determining school eligibility regarding module selection. Whilst the Life Education booking process describes school module selection occurring 6 weeks prior to the scheduled Life Education program delivery, schools were frequently not able to indicate which modules they had selected until 1-4 weeks before their scheduled visit despite having consented to participate. This resulted in a large number of schools becoming ineligible due to an insufficient timeframe to undertake appropriate parental consent procedures as per the approved ethics protocol. As a result of these issues, the original sampling frame for intervention schools of Term 2 was extended to include Term 3 government schools (n= 205), equalling a total of 406 government schools in Terms 2 and 3 (n=406) invited to participate to reach the required quota of schools. The original Term 4 sampling frame (n=123) for control government schools yielded the required quota of 15 schools.

There were 750 schools with a Life Education booking in Term 2, 3 and 4 2018 (Figure 3.2). Of these schools, 556 (74%) schools were ineligible (see Figure 3.2. for reasons for ineligibility). The original recruitment quota for both intervention and control schools was 30 schools (15 intervention and 15 control), however due to a lower than expected uptake of the modules with tobacco content, an additional 11 intervention schools (28 in total) were recruited to ensure 17 intervention schools each were recruited that had selected modules with tobacco or alcohol content. Of the remaining 194 eligible schools (127 intervention and 67 control), 161 (83%) were invited. Of the 161 eligible schools invited, 43 (27%) consented, 99 (61%) declined, and 19 (12%) did not respond (Figure 3.2).

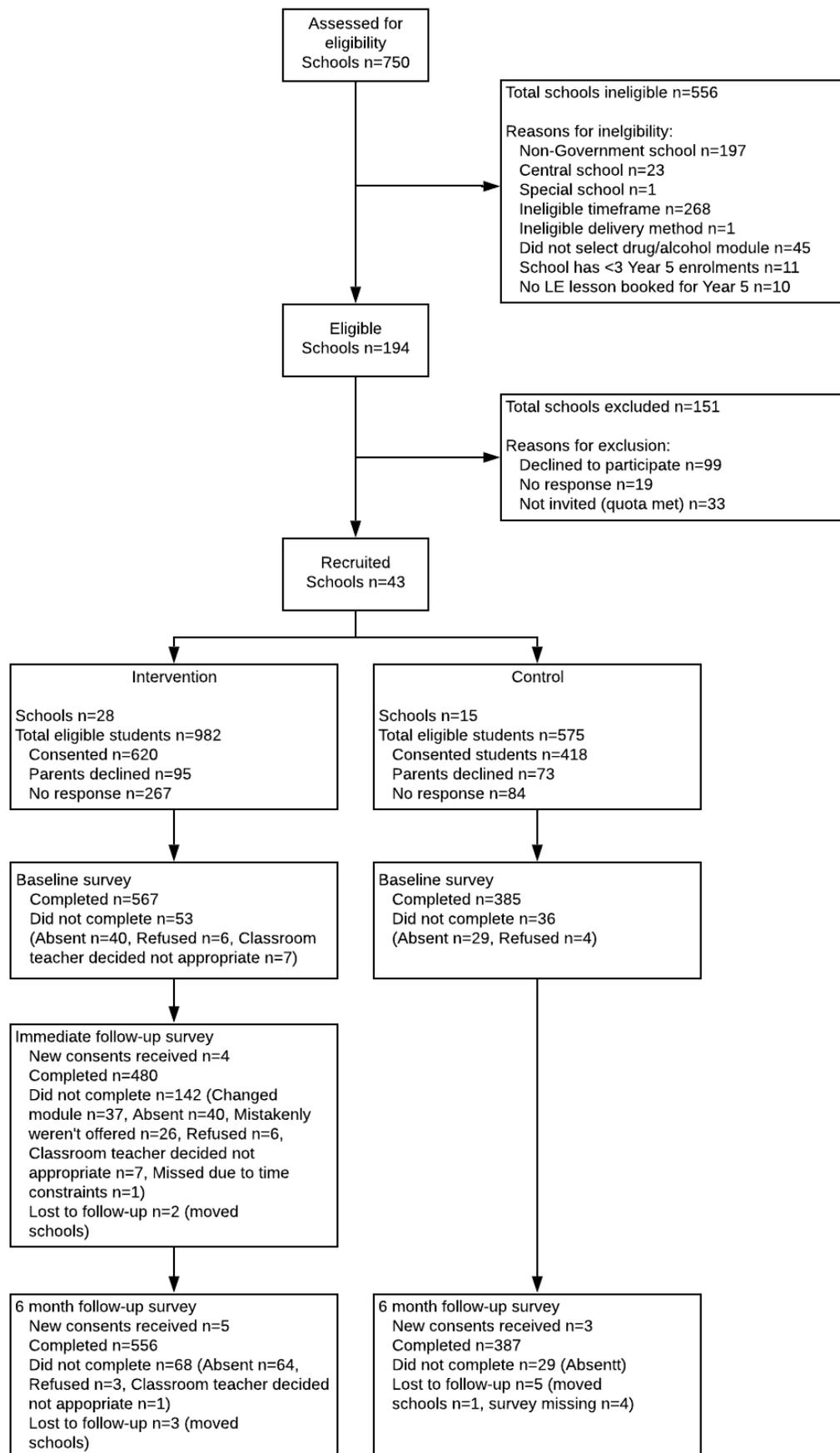


Figure 3.2. Study flow diagram

The characteristics of the 43 participating schools compared to all NSW government schools and to schools who had a Life Education booking in Terms 2 to 4 are shown in Table 3.2. While none of the 43 schools withdrew from the study, following baseline data collection two of the 28 intervention schools changed their module selection from a drug and alcohol to a module focused on cyber safety and were excluded from the primary analysis by module. Of the 26 intervention schools included in the primary analysis, 'On the Case' was delivered in seven schools, 'Think Twice' delivered in eight schools, and 'Decisions' delivered in 13 schools (Table 3.2).

Table 3.2. Characteristics of all NSW government schools, eligible schools who had a Life Education booking in Terms 2 to 4 and schools participating in the study

Characteristics	All NSW government schools (n=1590) ^a	Schools with 2018 LE booking in Terms 2 to 4 (n=529) ^a	Non-participating eligible schools (n=118)	Participating schools	
				Intervention (n=28)	Control (n=15)
	n (%)				
School size					
Small (<300)	884 (56)	325 (62)	63 (53)	14 (50)	10 (67)
Large (≥300)	696 (44)	203 (38)	55 (47)	14 (50)	5 (33)
SEIFA					
Lower (≤990)	868 (55)	301 (57)	67 (57)	15 (54)	8 (53)
Higher (>990)	722 (45)	228 (43)	51 (43)	13 (46)	7 (47)
Remoteness					
Major cities	866 (54)	242 (46)	59 (50)	15 (54)	7 (47)
Inner regional	497 (31)	194 (37)	39 (33)	8 (29)	7 (47)
Outer regional	210 (13)	87 (16)	18 (15)	4 (14)	1 (6)
Remote/Very remote	17 (1)	6 (1)	2 (2)	1 (4)	0 (0)
Module delivered ^b					
On the Case	-	-	-	7 (25)	3 (20)
Think Twice	-	-	-	8 (29)	5 (33)
Decisions	-	-	-	13 (46)	4 (27)

^a10 schools missing school size, ^b2 of the 26 schools received multiple modules (n=2) across year 5 classes; NB. LE=Life Education; SEIFA=Socio-Economic Indexes for Areas.

Of the 43 schools recruited, contact details were provided for 13 Aboriginal school staff members, seven of which were successfully contacted prior to baseline data collection. No parents contacted the Research Manager or Aboriginal research staff member to ask for more information about the study.

Students

At baseline, parental consent was provided for 1038 Year 5 intervention and control students (67% of enrolled students), of which 952 students (intervention n=567, control n=385) participated in the baseline survey (61% of enrolled students; 92% of students with parental consent). Reasons for student non-completion are shown in Figure 3.2. The demographic characteristics of students who completed the baseline survey shown in Table 3.3. There was a higher proportion of students reporting language other than English spoken at home ($p<0.001$), lower proportion of schools in inner regional, and higher proportion of schools in outer regional and remote areas ($p<0.001$) in intervention compared to control schools (Table 3.3). At baseline there was no differences between intervention and control students in any of the primary or secondary outcomes (Table 3.3).

Table 3.3. Baseline student demographic characteristics and primary and secondary outcomes^a

Characteristics	Intervention	Control	P value ^b
	(n=567 students)	(n=385 students)	
	n (%)		
Male ^c	258 (46)	207 (54)	0.04
Age (years), mean (SD)	10.32 (0.49)	10.28 (0.47)	0.45
Language Other than English spoken at home	133 (24)	44 (12)	<.0001
SEIFA			0.13
Lower (≤990)	170 (30)	130 (35)	
Higher (>990)	393 (70)	242 (65)	
Remoteness			<.0001
Major cities	417 (74)	261 (70)	
Inner regional	92 (16)	108 (29)	
Outer regional	45 (8)	3 (1)	
Remote/Very remote	9 (2)	0 (0)	
Primary outcome (Intentions)			
Tobacco (never)	317 (85)	317 (82)	0.33
Alcohol (never)	79 (28)	84 (22)	0.34
Other drugs (never)	171 (94)	357 (93)	0.73
Secondary outcomes			
Tobacco			
Awareness (correct response)	43 (12)	59 (15)	0.09
Knowledge (score out of 5), mean (SD)	2.08 (0.85)	2.17 (0.80)	0.22
Confidence to avoid (confident)	323 (86)	325 (84)	0.62
Alcohol			
Awareness (correct response)	83 (29)	112 (29)	0.82
Knowledge (score out of 5), mean (SD)	2.56 (1.06)	2.47 (1.09)	0.98
Confidence to avoid (confident)	233 (81)	285 (75)	0.16
Other drugs			
Awareness (correct response)	43 (24)	104 (27)	0.25
Knowledge (score out of 5), mean (SD)	3.65 (1.16)	3.77 (1.15)	0.58
Confidence to avoid (confident)	163 (90)	345 (90)	0.72

^an (%) reported unless otherwise specified; ^bBolded results $p < 0.01$; ^cGender included male, female and other; NB. SEIFA=Socio-Economic Indexes for Areas; SD=Standard deviation

At immediate follow up, 480 intervention students participated in the student survey. Four hundred and sixty seven of the 567 students who completed the baseline survey completed the immediate follow up survey (retention rate 83%). Reasons for student non-completion are shown in Figure 3.2 (and Appendix 3.2).

At 6 month follow up, 943 students participated in the student survey (intervention=556, control=387). Eight hundred and seventy (intervention n=513, control n=357) of the 952 students (intervention n=567, control n=385) who completed the baseline survey completed the 6 month follow up survey (retention rate 92%; intervention 91%, control 93%), with no

differential loss to follow up between intervention and control groups ($p=0.22$). Reasons for student non-completion are shown in Figure 3.2 (and Appendix 3.2).

Program effectiveness

Primary outcome: Intentions

There was no significant difference between intervention and control students for intentions to use tobacco, alcohol or other drugs in the future, at either immediate or 6 month follow up (Table 3.4; Figure 3.3; unadjusted results in Appendix 3.3).

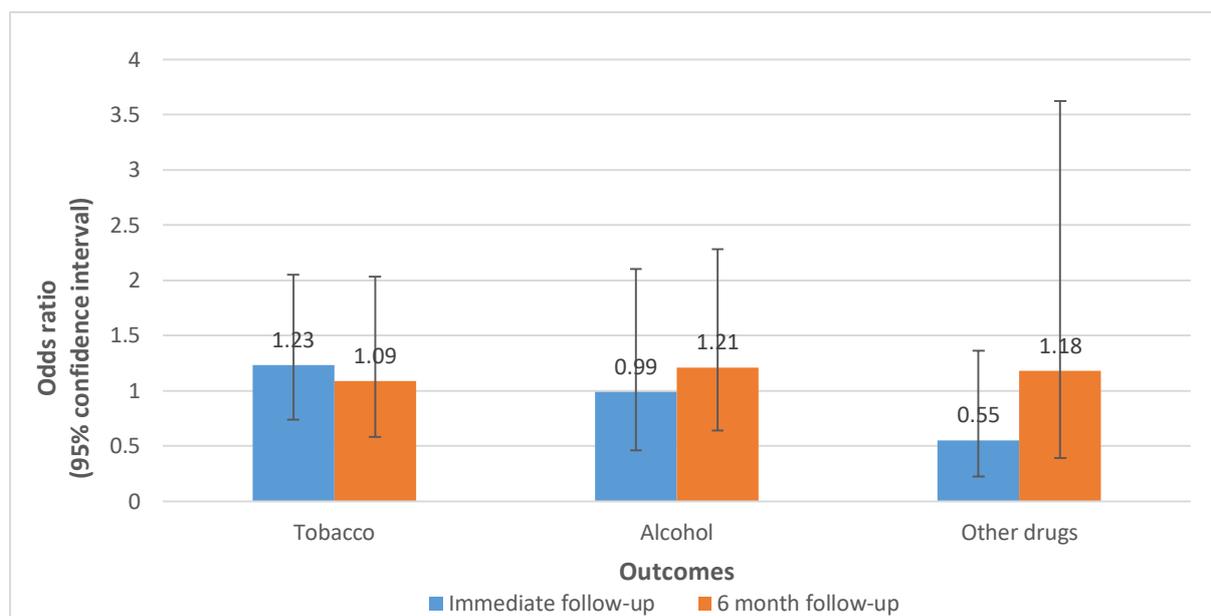


Figure 3.3. Intentions to use tobacco, alcohol or other drugs in the future at immediate and 6 month follow up

Secondary outcomes

Awareness

Intervention students had significantly greater awareness of tobacco norms at immediate follow up compared to control students, but not at 6 month follow up (Table 3.4). There was no difference between intervention and control students in awareness of alcohol and other drug use norms at immediate or 6 month follow up (Table 3.4).

Knowledge

Intervention students had significantly greater knowledge regarding tobacco, alcohol and other drug use following participation in Life Education sessions compared to control students at both immediate and 6 month follow up (Table 3.4; Figure 3.4).

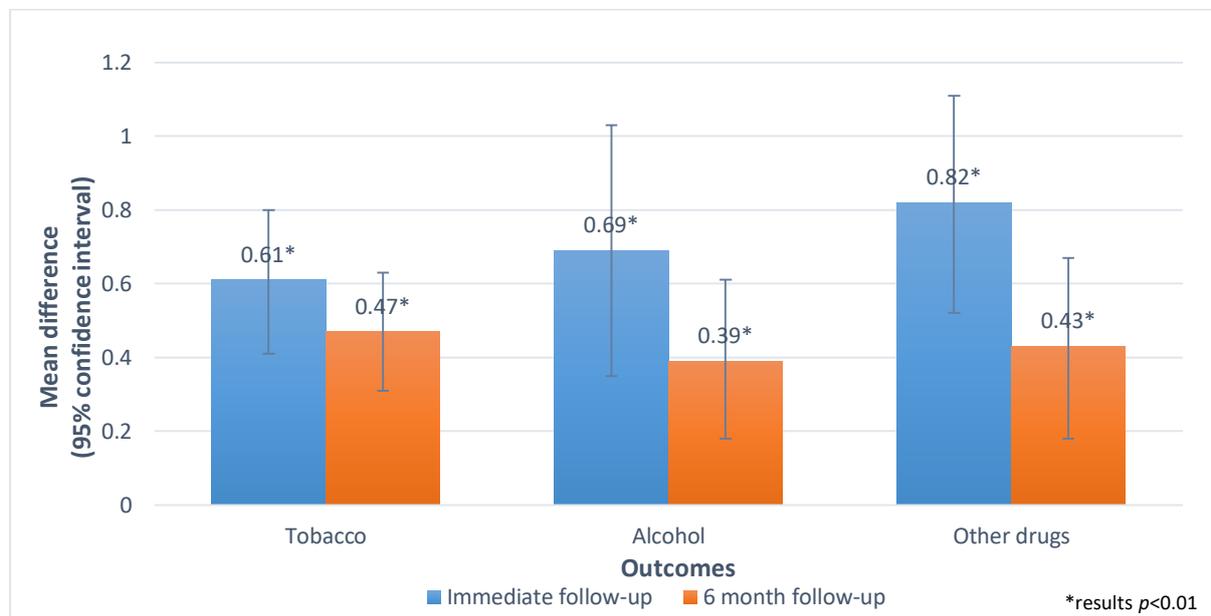


Figure 3.4. Tobacco, alcohol and other drug knowledge scores at immediate and 6 month follow up

Confidence to avoid tobacco, alcohol and other drugs in the future

There was no significant difference between intervention and control students in confidence to avoid tobacco, alcohol or other drugs in the future at either immediate or 6 month follow up (Table 3.4).

Table 3.4. Primary and secondary student outcomes at immediate and 6 month follow up^a

Outcome	Int immediate follow up		Int 6 month follow up		Cont 6 month follow up		Int immediate follow up vs. Cont baseline OR (95% CI), ^b <i>p</i> value ^c	Int vs. Cont at 6 month follow up	ICCs
	N	n (%)	N	n (%)	N	n (%)			
Primary outcome (Intentions)									
Tobacco (never)	358	308 (86)	363	304 (84)	386	313 (81)	1.23 (0.74, 2.05), <i>p</i> =0.41	1.09 (0.58, 2.03), <i>p</i> =0.79	0.000
Alcohol (never)	276	75 (27)	278	71 (26)	383	65 (17)	0.99 (0.46, 2.10), <i>p</i> =0.97	1.21 (0.64, 2.28), <i>p</i> =0.55	0.132
Other drugs (never)	170	156 (92)	176	163 (93)	382	352 (92)	0.55 (0.22, 1.36), <i>p</i> =0.19	1.18 (0.39, 3.62), <i>p</i> =0.76	0.021
Secondary outcomes									
Tobacco									
Awareness (correct response)	355	156 (44)	359	91 (25)	386	67 (17)	4.15 (2.27, 7.60), <i>p</i><0.001	2.20 (1.21, 3.99), <i>p</i> =0.01	0.062
Knowledge (score out of 5), mean (SD)	358	2.76 (0.90)	365	2.55 (0.93)	387	2.14 (0.77)		MD 0.61 (0.41, 0.80), <i>p</i><0.001	MD 0.47 (0.31, 0.63), <i>p</i><0.001
Confidence to avoid (confident)	357	320 (90)	363	330 (91)	386	344 (89)	1.69 (0.92, 3.10), <i>p</i> =0.09	1.23 (0.59, 2.54), <i>p</i> =0.57	0.000
Alcohol									
Awareness (correct response)	273	70 (26)	282	83 (29)	382	114 (30)	0.80 (0.51, 1.25), <i>p</i> =0.31	0.93 (0.55, 1.56), <i>p</i> =0.78	0.007
Knowledge (score out of 5), mean (SD)	277	3.27 (1.05)	284	2.74 (1.09)	387	2.32 (1.06)	MD 0.69 (0.35, 1.03), <i>p</i><0.001	MD 0.39 (0.18, 0.61), <i>p</i><0.001	0.071
Confidence to avoid (confident)	276	228 (83)	281	237 (84)	384	295 (77)	1.70 (0.94, 3.08), <i>p</i> =0.08	1.42 (0.76, 2.66), <i>p</i> =0.27	0.000
Other drugs									
Awareness (correct response)	176	69 (39)	175	57 (33)	379	114 (30)	1.64 (0.90, 2.98), <i>p</i> =0.11	1.51 (0.81, 2.83), <i>p</i> =0.19	0.050
Knowledge (score out of 5), mean (SD)	178	4.36 (1.09)	176	4.22 (1.02)	387	3.92 (1.18)	MD 0.82 (0.52, 1.11), <i>p</i><0.001	MD 0.43 (0.18, 0.67), <i>p</i>=0.001	0.046
Confidence to avoid (confident)	174	163 (94)	176	164 (93)	383	355 (93)	1.96 (0.72, 5.33), <i>p</i> =0.18	1.73 (0.56, 5.33), <i>p</i> =0.33	0.000

^aOutput reported as n (%) unless stated otherwise; ^bOutput reported as OR (95%CI) unless stated otherwise; ^cBolded results *p*<0.01; NB. Int=intervention; Cont=control; ICC=intra-class correlation; OR=Odds ratio; CI=Confidence Intervals; SD=Standard deviation; MD=mean difference.

Sensitivity analyses of the primary outcomes

Similar to the primary analysis, there was no significant difference between intervention and control students for intentions to use tobacco, alcohol or other drugs in the future at either immediate or 6 month follow up for sensitivity analyses of only those students who completed baseline and follow up surveys, accounting for previous exposure to drug and alcohol curricula, and of all participating students irrespective of module delivered (Appendix 3.4).

Per protocol analysis of the primary outcome

The school frequency of booking any Life Education module, and the mean proportion of schools booking any Life Education module and Life Education modules with drug and alcohol content, over the last 5 years for the Year 5 cohort of students in 2018 is shown in Table 3.5. Sixteen percent of schools booked a Life Education module annually over the last 5 years for the Year 5 cohort of interest and the mean frequency of years Life Education modules booked was 2.6 years. The mean number of any Life Education modules received by schools was 3.5 modules, of which the mean number Life Education modules with drug and alcohol content received was 2.7 modules. There was no significant difference in intentions to use tobacco, alcohol or other drugs in the future at either immediate or 6 month follow up in the per protocol analysis between intervention students defined by ≥ 4 years schools received Life Education modules, receiving a total of ≥ 4 Life Education modules (any focus) and receiving ≥ 4 Life Education modules targeting drug and alcohol over the previous 5 years and control students (Table 3.5; Appendix 3.5).

Table 3.5. School level booking history for Life Education modules for Year 5 student cohort (N=43)

	n (%)
Total number of any LE modules in last 5 years (2013-2017)	
<4 modules	24 (56)
≥ 4 modules	19 (44)
Number of LE drug and alcohol modules bookings in last 5 years	
<4 modules	29 (67)
≥ 4 modules	14 (33)
LE booking (any module) by year over last 5 years	
Schools with booking <4 of last 5 years	30 (70)
Schools with booking ≥ 4 of last 5 years	13 (30)
Schools with an annual booking for the last 5 years	7 (16)

NB. LE=Life Education.

Subgroup analysis of the primary outcomes

There were no significant differential intervention effects between subgroups defined by student low and high risk factor scores for any of the intentions outcomes on examination of the interaction term (Table 3.6).

Table 3.6. Subgroup analysis of the primary outcome (intentions) – overall risk factor score^a

Outcome	Int 6 month follow up		Cont 6 month follow up		Int vs. Cont at 6 month follow up ^b OR (95% CI)
	N	n (%)	N	n (%)	
Cigarette smoking intentions (never)					
Low risk (0-2)	209	184 (88)	211	177 (84)	1.09 (0.45, 2.66)
High risk (3+)	106	79 (75)	126	92 (73)	0.98 (0.39, 2.48)
Alcohol consumption intentions (never)					
Low risk (0-2)	123	28 (23)	162	30 (19)	1.13 (0.46, 2.78)
High risk (3+)	112	26 (23)	171	24 (14)	1.37 (0.53, 3.56)
Other drug use intentions (never)					
Low risk (0-2)	106	101 (95)	234	218 (93)	2.04 (0.45, 9.23)
High risk (3+)	44	39 (89)	103	93 (90)	0.32 (0.04, 2.64)

^aEstimates presented originate from models inclusive of interaction term (treatment × time × subgroup); ^bBolded if interaction term (treatment × time × subgroup) $p < 0.01$; NB. Int=intervention; Cont=control.

Exploratory measures

Risk and protective factors for tobacco, alcohol and other drug use

At 6 month follow up, the proportion of students at risk of conduct, hyperactivity and peer problems ranged from 7% to 33% in the intervention group and 5% to 33% in the control group (Table 3.7). The proportion of students that reported having a parent/carer, sibling, or friend in their life that smoked cigarettes or consumed alcohol was 25% and 22% respectively in the intervention group and 29% and 85% respectively in the control group at 6 month follow up.

At 6 month follow up, the mean scores for each protective factor ranged from 3.04 to 3.50 in the intervention group, and 2.97 to 3.47 in the control group. The proportion of students that reported high scholastic competence at 6 month follow up was 55% in the intervention group and 46% in the control group (Table 3.7). There was no significant difference between intervention and control students for any measure of protective factors at 6 month follow up (Table 3.8).

Table 3.7. Risk and protective factors for tobacco, alcohol and other drug use^a

Outcome	Intervention				Control			
	Baseline		6 month follow up		Baseline		6 month follow up	
	N	n (%)	N	n (%)	N	n (%)	N	n (%)
Risk factors								
Conduct problems (at risk, ≥5)	547	37 (7)	532	37 (7)	379	25 (7)	378	17 (5)
Hyperactivity problems (at risk, ≥7)	554	40 (7)	533	42 (8)	378	29 (8)	379	28 (7)
Peer problems (at risk, ≥4)	552	180 (33)	534	174 (33)	380	118 (31)	380	125 (33)
People that smoke ^b	562		548		382		381	
Parent/carer, sibling, or friend		149 (27)		139 (25)		115 (30)		112 (29)
Parent/carer		136 (24)		117 (21)		99 (26)		100 (26)
Sibling		20 (4)		15 (3)		11 (3)		13 (3)
Friends		16 (3)		23 (4)		13 (3)		9 (2)
People who consume alcohol ^b	554		549		379		383	
Parent/carer, sibling, or friend		431 (78)		430 (78)		315 (83)		324 (85)
Parent/carer		419 (76)		421 (77)		310 (82)		319 (83)
Sibling		42 (8)		42 (8)		34 (9)		48 (13)
Friends		24 (4)		32 (6)		22 (6)		18 (5)
Protective factors								
Family/school/community connection (Mean, SD)	561	3.44 (0.57)	550	3.50 (0.59)	380	3.46 (0.51)	383	3.47 (0.56)
Pro-social peers (Mean, SD)	554	3.21 (0.59)	537	3.21 (0.65)	380	3.21 (0.60)	380	3.19 (0.61)
Self-esteem (Mean, SD)	562	3.19 (0.59)	549	3.21 (0.61)	380	3.13 (0.55)	384	3.11 (0.59)
Empathy (Mean, SD)	561	3.07 (0.74)	550	3.04 (0.76)	378	3.05 (0.74)	384	2.97 (0.72)
Scholastic competence (high level)	549	274 (50)	528	292 (55)	377	165 (44)	378	174 (46)

^aN sizes include all participating students irrespective of module participation; ^bDoes not total 100% as multiple response item; NB. SD=Standard deviation.

Table 3.8. Intervention effect on protective factors at 6 month follow up

Protective factors ^a	Int 6 month follow up		Cont 6 month follow up		Int vs. Cont at 6 month follow up
	N	Mean (SD)	N	Mean (SD)	MD (95%CI) ^b
Family/school/community connection	550	3.50 (0.59)	383	3.47 (0.56)	0.05 (-0.03, 0.13), p=0.19
Pro-social peers	537	3.21 (0.65)	380	3.19 (0.61)	0.02 (-0.07, 0.12), p=0.64
Self-esteem	549	3.21 (0.61)	384	3.11 (0.59)	0.07 (-0.02, 0.16), p=0.13
Empathy	550	3.04 (0.76)	384	2.97 (0.72)	0.06 (-0.05, 0.17), p=0.29
Scholastic competence (high level), n (%)	528	292 (55)	378	174 (46)	OR 1.17 (0.76, 1.81), p=0.47

^aOutput reported as mean (SD) unless stated otherwise; ^bOutput reported as MD (95%CI) unless stated otherwise; NB. Int=intervention, Cont=control; SD=Standard deviation; MD=mean difference; CI=Confidence interval.

Contextual measures

Previous exposure to drug and alcohol lessons

At baseline, 36% students reported they had received any lesson or part of a lesson at school during 2018 about smoking cigarettes, 31% each about alcohol or illegal drugs (Table 3.9). At 6 month follow up, 61% to 71% of intervention students reported they had received at least part of a lesson at school during 2018 about smoking cigarettes, alcohol or illegal drugs, compared to 42% to 52% of control students (Table 3.9). At baseline, 81% intervention group students and 66% of control group students reported they had previously attended a Life Education session.

Table 3.9. Previous exposure to drug and alcohol lessons at baseline and 6 month follow up^a

Factor	Intervention				Control			
	Baseline		6 month follow up		Baseline		6 month follow up	
	N	n (%)	N	n (%)	N	n (%)	N	n (%)
Received previous lessons at school during 2018 ^b								
Smoking cigarettes	565	205 (36)	551	393 (71)	384	134 (35)	386	200 (52)
Alcohol	564	173 (31)	552	337 (61)	382	117 (31)	384	163 (42)
Illegal drugs	564	181 (32)	553	340 (61)	379	114 (30)	381	174 (46)
Attended a LE lesson before ^c	564	459 (81)	-	-	381	251 (66)	-	-

^aN sizes include all participating students irrespective of module participation; ^bIncludes responses 'yes, more than one lesson'/'yes, one lesson'/'yes, part of a lesson' vs. 'no, not even part of a lesson'/'don't know/not sure'; ^cIncludes responses 'yes' vs. 'no'/'don't know/not sure'; NB. LE=Life Education.

Impact measures

Use of Life Education student resources

At baseline, 12% of intervention and control students had used the Life Education website, 5% reported having used a Life Education mobile app, 8% had completed a Life Education activity with a parent, 54% had completed Life Education related lesson with a teacher, 31% had used the Life Education student workbook, and 24% students had not used any Life Education resource (Table 3.10). At baseline and 6 month follow up respectively, 12% and 16% of intervention students had

used the Life Education website, 5% and 8% had used a Life Education mobile app, 6% and 10% had completed a Life Education activity with a parent, 57% and 62% had completed Life Education related lesson with a teacher, 33% and 53% had used the Life Education student workbook, and 22 and 20% students had not used any Life Education resource (Table 3.10).

Table 3.10. Student Life Education resource use at baseline and 6 month follow up^a

Factor	Intervention		Control
	Baseline (N=556)	6 month follow up (N=542) n (%)	Baseline (N=376)
Used LE resources before ^b			
Website	64 (12)	88 (16)	43 (11)
Mobile App	28 (5)	42 (8)	14 (4)
Activity with parent	35 (6)	53 (10)	36 (10)
Lesson with teacher	315 (57)	338 (62)	192 (51)
Student workbook in class	182 (33)	285 (53)	103 (27)
None	123 (22)	109 (20)	95 (25)

^aN sizes include all participating students irrespective of module participation; ^bDoes not total 100% as multiple response item; NB. LE=Life Education.

Student perceived changes in awareness, knowledge, skills, confidence in avoiding and intentions regarding tobacco, alcohol and other drugs after attending Life Education (intervention group only)

At immediate follow up, the proportion of intervention students that reported they felt they knew more about the harms of smoking, effects of alcohol and effects of illegal drug use than before attending the Life Education session was 86%, 68%, and 62%, respectively (Table 3.11).

Table 3.11. Student self-reported change in awareness regarding tobacco, alcohol and other drugs after attending Life Education in the Intervention group at immediate follow up^a

Factor	Intervention immediate follow up	
	N	n (%)
Do you know more about the harms of smoking than before attending today's Life Education session?	354	
Yes		303 (86)
No/don't know		51 (14)
Do you know more about the effects of alcohol than before attending today's Life Education session?	274	
Yes		186 (68)
No/don't know		88 (32)
Do you know more about the effects of illegal drug use than before attending today's Life Education session?	172	
Yes		107 (62)
No/don't know		65 (38)

^aN sizes include only students who participated in the relevant module.

At immediate follow up, of intervention students who participated in relevant Life Education modules, 77% to 92% reported they felt they had learnt something new about tobacco, 78% to 89% reported they felt they had learnt something new about alcohol, and 83% to 88% reported they felt they had learnt something new about other drug use after participating in a Life Education session (Table 3.12).

Table 3.12. Intervention students' perceived change in knowledge, skills and confidence to avoid tobacco, alcohol and other drugs after Life Education session attendance^a

Knowledge, skills and confidence to avoid tobacco, alcohol, and other drugs	Intervention immediate follow up					
	Tobacco		Alcohol		Other drugs	
	Learnt something new		Learnt something new		Learnt something new	
	N	n (%)	N	n (%)	N	n (%)
Understand how tobacco/alcohol/illegal drugs affects the body?	356	326 (92)	273	244 (89)	173	152 (88)
Understand why people choose not to smoke?	356	301 (85)	-	-	-	-
Think about how smoking/alcohol/illegal drugs affects you or people you know?	354	309 (87)	272	227 (83)	172	148 (86)
Be more aware of the risks of drinking alcohol/illegal drug?	-	-	271	239 (88)	172	151 (88)
Know more about the laws in Australia for tobacco/alcohol/illegal drugs?	353	297 (84)	272	213 (78)	173	144 (83)
Work out things you can do to avoid second-hand smoke?	355	272 (77)	-	-	-	-
Know how to knock back (or refuse) a cigarette/alcohol/drugs if others try to offer you?	353	277 (78)	273	217 (79)	173	143 (83)
Feel confident to make a decision to not smoke/drink alcohol/use illegal drugs?	353	288 (82)	270	233 (86)	173	149 (86)

^aN sizes include only students who participated in the relevant module.

At 6 month follow up, 62%, 41% and 61% of intervention students reported that they felt they were less likely to smoke, drink alcohol or use other drugs in the future respectively based on what they had learnt in a Life Education session (Table 3.13).

Table 3.13. Intervention student perceived change in intentions to use tobacco, alcohol and other drugs based on learnings from Life Education session^a

Factor	6 month follow up	
	N	n (%)
Has the information you learned from Life Education made you less or more likely to smoke in the future?	363	
Less likely		224 (62)
More likely		8 (2)
The same/don't know		131 (36)
Did the information you learned from Life Education make less or more likely to drink alcohol in the future?	283	
Less likely		116 (41)
More likely		9 (3)
The same/don't know		158 (56)
Did the information you learned from Life Education make you less or more likely to use illegal drugs in the future?	175	
Less likely		106 (61)
More likely		4 (2)
The same/don't know		65 (37)

^aN sizes include only students who participated in the relevant module.

Discussion of tobacco and alcohol learnings post Life Education session at home (intervention only)

At immediate follow up, 49% of intervention students stated they would discuss what they learnt about smoking and 43% would discuss what they learnt about alcohol during the Life Education session with someone at home (Table 3.14). At 6 month follow up, 51% of intervention students discussed what they learnt during the Life Education session about smoking and 42% about alcohol with someone at home (Table 3.14).

Table 3.14. Intervention student intention to, and discussion of, what was learnt during Life Education session regarding smoking and alcohol with someone at home^a

Outcome	Intervention			
	Immediate follow up 'Intention'		6 month follow up 'Discussed'	
	N	n (%)	N	n (%)
Smoking	351	171 (49)	362	185 (51)
Alcohol	269	117 (43)	281	117 (42)

^aN sizes include only students who participated in the relevant module

Summary

This component of the evaluation sought to examine the impact of participation in Life Education modules related to tobacco, alcohol and other drug use on Year 5 students' intentions to use tobacco, alcohol and other drugs in the future and a range of secondary outcomes at immediate and 6 month follow up. At both immediate and 6 month follow up there was no significant difference in the prevalence of intentions to use tobacco, alcohol and other drugs in the future between

intervention and control students. This result was consistent in all subgroup, sensitivity and per protocol analyses.

With respect to secondary outcomes, there was a consistent effect of participation in Life Education sessions on intervention students' knowledge of tobacco, alcohol and other drug issues at both immediate and 6 month follow up. The effect size for all three outcomes was almost half at 6 month, compared to immediate follow up. In contrast, there was no evidence that participation in Life Education had an impact on confidence to avoid tobacco, alcohol and other drug use by intervention students either immediately or at 6 month follow up. Similarly, there was little evidence that participation in Life Education had an impact on awareness of alcohol and other drug use in adolescents, but did have an impact for tobacco with a greater proportion of intervention students correctly estimating tobacco use by adolescents at both immediate but not 6 month follow up compared to control students. There was no evidence of an intervention effect of any of the five examined protective factors for tobacco, alcohol or other drug use.

In terms of previous exposure to drug and alcohol curricula, a minority of students at baseline reported previously receiving a lesson on tobacco, alcohol or other drug use (31%-36%) compared to over half at 6 month follow up (52%-62%), and it appeared more intervention students had participated in Life Education compared to control students at baseline (81% versus 66%). Previous use of Life Education resources by intervention students was similar at baseline and 6 month follow up (baseline range 5%-57%; 6 month follow up range: 8%-62%) with the exception of the Life Education student workbook which 33% of students reported having used at baseline and 53% at follow up.

At immediate follow up, a large proportion of intervention students (62%-92%) reported they felt they knew more about the harms and effects of, or learnt something new about, tobacco, alcohol or other drugs, and 41% to 62% felt they were less likely to use tobacco, alcohol and other drugs as a result of the Life Education session. Approximately half of intervention students at baseline intended discussing (43%-49%), or at follow up did discuss (42%-51%), what they learnt in Life Education session with someone at home.

Overall, this pattern of results is largely consistent with previous evaluation of the Life Education Program. For example, previous pre-post studies have similarly found no effect of participation in

the Life Education Program on student intentions to use tobacco or alcohol in the future,^{2,3} and similarly found a consistent intervention effect on knowledge of tobacco and alcohol issues and awareness of tobacco use norms.^{2,3} Similarly, a quasi-experimental study reported no positive intervention effects on student use of tobacco or alcohol.^{1,20,21}

The study had a number of strengths, including the study design which included both a control group, pre-post, and both short- and long-term assessment of a comprehensive range of student outcomes. Additionally, the inclusion of sensitivity, subgroup and per protocol analyses on the basis of previous exposure to the Life Education Program was a study strength.

The results need to be considered against the characteristics of the study, including the non-randomised study design. A cluster-randomised controlled trial, where schools were randomly allocated to receive the Life Education intervention was not deemed feasible in the context of the ongoing delivery of the Life Education Program given schools are expected to book their Life Education session a year in advance and to select modules 6 weeks prior to the visit. Additionally, the use of a no intervention control group rather than a usual care control group, precluded examination of any differential effects of the Life Education Program compared to usual school drug education curricula delivered by school teachers.

The study sample was limited to government primary schools and as a result it is unknown whether the results of this study are generalisable to Catholic and independent primary schools. The representativeness of the reported findings is limited by the low principal consent rate, however the similarity in characteristics participating and all NSW primary schools suggests the impact may be minor. Whilst the required quota of schools for the study accounting for the required number of schools selecting each module of interest was achieved, the participation rate and number of enrolled students at participating schools was lower than expected. Whilst the attrition from baseline to 6 month follow up was greater than estimated, the total number of students at 6 month follow up was lower than expected. As a result of this and accounting for the combined baseline prevalence in the intervention and control group, the study was powered to detect the target 10% difference between intervention and control groups in intentions to use tobacco and other drug use, but not alcohol use (powered to detect an 11% difference). Additionally whilst study methods were adopted to ensure the cultural appropriateness of recruitment and data collection from

Aboriginal and Torres Strait Islander students, no data analysis in relation to Aboriginal students was undertaken.

The outcomes of the study were limited to student intentions in the future to use tobacco, alcohol or other drugs, and knowledge, awareness, and skills related to such use. Outcomes regarding use of such drugs were not deemed appropriate for assessment in the Year 5 cohort due to the likely low prevalence of use which limits the ability to detect an effect of the intervention without a much larger study sample. Given this, intentions to use tobacco, alcohol and other drugs in the future was selected as the most appropriate use-related measure. Student knowledge, awareness and skills were selected as additional outcome measures given the Program objectives.

A limited number of longitudinal studies have investigated the association between primary school-aged children's intentions to use tobacco, alcohol or other drugs in the future, and adolescent initiation to such drugs, with some studies reporting a positive association exists.²²⁻²⁴ The strongest evidence from longitudinal studies, as synthesised in previous reviews^{10,25-27} have found risk and protective factors such as peer or family favourable attitudes towards or use of tobacco, alcohol and other drug use, and pro-social peers, to have the strongest associations with adolescent tobacco, alcohol and other drug use. Despite these findings of associations, it is unclear what impact the observed intervention effect on student knowledge of tobacco, alcohol and other drug use issues may have on subsequent use of such drugs. A longer term follow up is required to assess this.

Finally, the per protocol analysis to examine the impact of dose of the Life Education Program was limited to the availability of school level data for previous Life Education bookings for the cohort of interest, as data were not available at the individual student level regarding which Life Education modules individual students had participated in. Data obtained from Life Education NSW indicated that only 16% of intervention schools had implemented Life Education modules annually over the last 5 years as per the designed Life Education implementation model. As a result, schools with less than optimal implementation (i.e. 4 or more years of Life Education bookings for the cohort of interest as opposed to the intended 5 of the last 5 years) were compared to the control group to ensure a sufficient sample of schools to assess the impact of Life Education program dose. It is unknown what impact the Life Education Program at its full intended dose that is, with cohorts of students receiving annual Life Education modules from preschool to Year 7 may have on student outcomes.

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**Chapter 4: Economic evaluation of the delivery of the Life Education
Program in NSW in 2017/2018**

Introduction

Economic evaluations are considered an important component of a comprehensive evaluation of public health programs¹ to provide decision-makers with evidence of the economic value of such programs.^{2,3} The National Institute for Health and Care Excellence guidelines recommend that all evaluations of public health programs include the use of a common method of cost-effectiveness analysis.⁴

No previous economic evaluations were identified of the Life Education Program in Australia or New South Wales (NSW), either for the Program overall or specifically for drug and alcohol modules. In the 2017/2018 Life Education NSW annual report it was estimated that the health system saved \$10 for every dollar spent on Life Education due to prevention, however it is unclear what this estimate was based on.⁵

Aims

The aims of this study were to:

1. Describe the costs of delivering the Life Education Program to primary schools in NSW for the 2017/18 financial year from both a public finance perspective (i.e. including all sources of funding and income) and NSW Health funding perspective (i.e. including all funding attributed to the NSW Ministry of Health) for:
 - a. Any Year group receiving any Life Education module (i.e. considering exposure to entire Life Education program);
 - b. Year 5 students that received any Life Education module;
 - c. Year 5 students that received any of the three Life Education drug and alcohol modules ('On the Case', 'Think Twice', 'Decisions').
2. Conduct a cost-effectiveness analysis of the Life Education drug and alcohol modules ('On the Case', 'Think Twice', 'Decisions') delivered to Year 5 students in NSW government primary schools, from the public finance perspective, with respect to the primary and secondary student outcomes of the effectiveness study described in Chapter 3 where a significant effect was observed at 6 month follow up.

Methods

Design and participants

Full details of the design and participant characteristics of the study regarding the effectiveness of Life Education drug and alcohol modules for Year 5 student outcomes are described in Chapter 3. Briefly, eligible schools were government primary schools located in NSW with a Life Education booking for one of three available drug and alcohol focused modules for Year 5 students. All Year 5 students in classes that had such a booking were eligible to participate in the study.

Module delivery

Full details of Life Education Program delivery for the effectiveness study are described in Chapter 3. In brief, Year 5 students in the intervention group received one or more of the following three drug and alcohol focused Life Education modules: 'On the Case'; 'Think Twice'; or 'Decisions'. The control group received no Life Education drug and alcohol modules during the study period.

Data collection procedure

Cost data

The following cost data for the 2017/2018 financial year were obtained from Life Education NSW:

- The total amount of Life Education NSW funding received, including the proportion (or whole amount) from all sources;
- The annual costs associated with the delivery of the Life Education Program in primary schools in NSW; and
- The average time Life Education Educators spent per school and an estimate of the percentage of time spent in: face-to-face service delivery (including student and parent sessions); preparation time; administration time; and travel time.

Effect data

Full details of the data collection methods for the effectiveness study are described in Chapter 3. Briefly, participating Year 5 students completed a confidential paper survey during class time. Intervention students completed a baseline survey immediately prior to attending the Life Education NSW module (Terms 2 and 3), an immediate follow up survey following participation in the Life Education NSW module (Terms 2 and 3) and a 6 month follow up survey (Term 4). Control students completed a baseline survey (Terms 2 and 3) and a 6 month follow up survey only (Term 4).

Measures

Cost measures

Based on the information obtained from Life Education NSW the costs associated with the delivery of the Program in primary schools in NSW included employee costs (wages), costs associated with equipment and materials (including capital expenditure, maintenance, program/resources, storage and delivery, workbook supplies and program promotion), travel costs (including educator vehicle costs, travel reimbursement and accommodation), and administrative costs.

Effect measures

Details of the outcome measures of the effectiveness study are described in full in Chapter 3 and summarised below.

Primary outcome

Intentions to use tobacco, alcohol or other drugs in the future

Intentions regarding use of tobacco, alcohol and other drugs in the future were measured by items sourced from a survey used in a previous evaluation of the Life Education Program.⁶

Secondary outcomes

Awareness, knowledge and confidence to avoid

Student awareness and knowledge of issues related to tobacco, alcohol or other drugs were assessed using items from a previous evaluation of Life Education.⁶ Confidence to avoid using tobacco, alcohol or other drugs was measured using an item from the California Healthy Kids Survey for elementary students.⁷

Statistical analysis

Costs

The total funding and income received by Life Education NSW and the total costs to deliver Life Education and the associated costs for average time spent per school for Life Education Educators to deliver the Program are reported descriptively over a one-year time horizon for the 2017/18 financial year from a public finance perspective (based on total funding received by Life Education) and NSW Health funding perspective. Calculated cost outcomes (i.e. cost of program delivery) included: total mean cost per school for any module in any Year group, weighted average cost per school; and mean cost per student attending Life Education, and per Life Education session, any Year

5 Life Education module and the three Year 5 drug and alcohol modules of interest (see Appendix 4.1 for calculations of cost measures). Costs by socio-economic disadvantage and remoteness are reported for the delivery of: any Year 5 Life Education module and the three Year 5 drug and alcohol modules of interest.

Cost-effectiveness analysis

Effects

Student outcome measures were taken from the longest follow up data collection time point (6 month) given the likelihood that this follow up point would indicate sustainability of any effects.

Cost-effectiveness analysis

Cost-effectiveness analysis was conducted on primary and secondary outcomes where a significant effect on student outcomes was observed at 6 month follow up (as reported in Chapter 3), from the public finance perspective. For continuous outcomes, the mean differences (and standard deviations (SDs)) reported in Chapter 3 are used in the cost-effectiveness analysis. The same modelling approach to determine program effectiveness in Chapter 3 was used for the cost-effectiveness analyses.

Incremental cost-effectiveness ratios (ICERs; a commonly used economic measure combining cost and outcome) were calculated to determine the incremental cost of delivering the modules for each one unit increase in student drug and alcohol knowledge score.² ICERs were calculated by dividing the difference in total costs of delivering the drug and alcohol modules between intervention and control groups by the difference in change in knowledge score for each knowledge outcome (i.e. $\Delta\text{Cost}/\Delta\text{Effect}$).²

Uncertainty analysis

To account for uncertainty due to sampling variation within all analyses, nonparametric bootstrapping analysis with 1000 iterations was used to generate 95% uncertainty intervals (UI) around the cost outcomes.²

All analyses were carried out using Microsoft Excel software Office 365.

Results

In the 2017/18 financial year, there were 1198 primary schools with a booking for one or more Life Education program modules in NSW (Tables 4.1 and 4.2).

Table 4.1. Demographics of all primary schools that booked Life Education Program in NSW 2017/18 financial year compared to all primary schools in NSW in 2017^a

	Primary schools with LE booking (N=1198) ^b n (%)	All NSW primary schools (N=2411) n (%)
School demographics		
School size		
Small (<300 students)	776 (65)	1302 (54)
Large (≥300 students)	422 (35)	1109 (46)
SEIFA		
Lower (≤990)	589 (49)	1234 (51)
Higher (>990)	609 (51)	1177 (49)
Remoteness		
Major Cities	572 (48)	669 (28)
Inner Regional	374 (31)	1355 (56)
Outer Regional	227 (19)	344 (14)
Remote/Very Remote	25 (2)	43 (2)
School type		
Combined	10 (<1)	240 (10)
Primary	1182 (99)	2129 (88)
Special	6 (<1)	42 (2)
School sector		
Catholic	150 (13)	438 (18)
Independent	199 (17)	383 (16)
Public	849 (71)	1590 (66)
Aboriginal and/or Torres Strait Islander per school, mean %	6.6 ^c	6.1 ^d
LBOTE per school, mean %	27.8 ^e	33.3 ^f

^an (%) reported unless otherwise specified; ^bIncludes 3 primary schools in the Australian Capital Territory, ^c27 schools missing Aboriginal and/or Torres Strait Islander status; ^d484 schools missing Aboriginal and/or Torres Strait Islander status; ^e47 schools missing LBOTE; ^f305 schools missing LBOTE; NB. LE=Life Education; NSW=New South Wales; SEIFA=Socio-Economic Indexes for Areas; LBOTE=Language Background Other Than English.

Table 4.2. Characteristics of primary schools that booked a Life Education module in NSW in the 2017/18 financial year, n=1998^a

Characteristics	n
Number of students	
All Years	306,253
All Years attending LE	260,914
Year 5 students attending LE	63,737
Number of session delivered	
All Years	12,821
Year 5 students	2970
Number of sessions delivered per Year 5 program, n (%) ^b	
On the Case	504 (17)
Think Twice	297 (10)
Decisions	857 (29)
It's Your Call	525 (18)
Relate Respect Connect	787 (26)
Number of students attending each Year 5 program, n (%) ^b	
On the Case	11,070 (17)
Think Twice	6652 (10)
Decisions	18,357 (29)
It's Your Call ^c	11,251 (18)
Relate Respect Connect ^d	16,407 (26)
Delivery Type, n (%)	
Direct Delivery at this school	33 (3)
Hosted at other school	53 (4)
Static classroom	45 (4)
Van at this school	1067 (89)
Total number of teaching hours	6523
Total number of parent sessions held ^c	224
Total number of parents attended ^d	3051

^an reported unless otherwise specified; ^b190 schools did not book a Year 5 program; ^cLE Year 5 discontinued drug and alcohol module; ^dLE Year 5 non-drug and alcohol modules; NB. LE=Life Education.

Costs

As reported by Life Education NSW (Chapter 2), total funding and income in 2017/2018 financial year received by Life Education NSW was \$6,014,000 (Figure 4.1) including \$2,110,000 from NSW Health, and total costs to deliver the Program in NSW was \$5,825,000 (Figure 4.2; see Appendix 4.2 for breakdown of costs). Life Education NSW reported that Life Education Educators spend 47% of their time in face-to-face service delivery (including both student and parent sessions), 27% preparing for session delivery, 20% completing administration tasks, and 6% travelling on average across schools. The associated costs for Life Education Educators' average time spent for each activity across schools is presented in Figure 4.3.

Funding and income (\$'000)

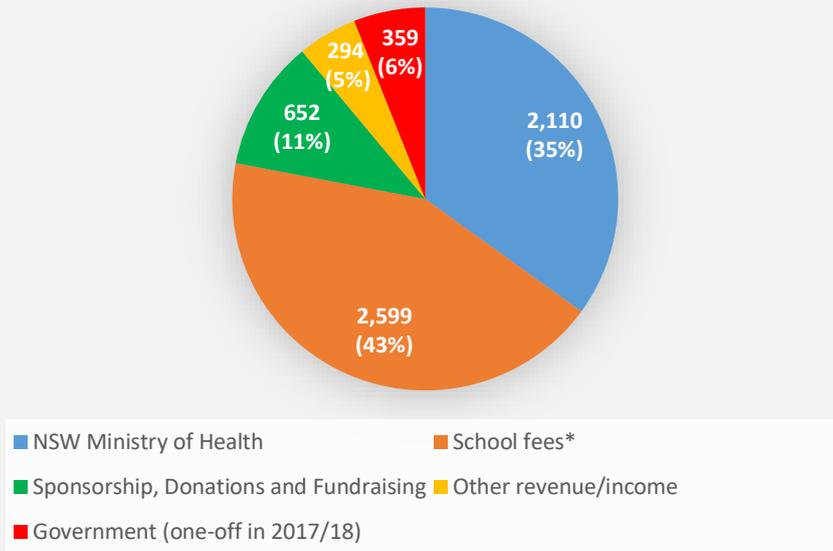


Figure 4.1. Summary of the funding and income sources of Life Education NSW in 2017/18 financial year

*It is unknown what proportion of school fees are passed onto parents

Costs (\$'000)

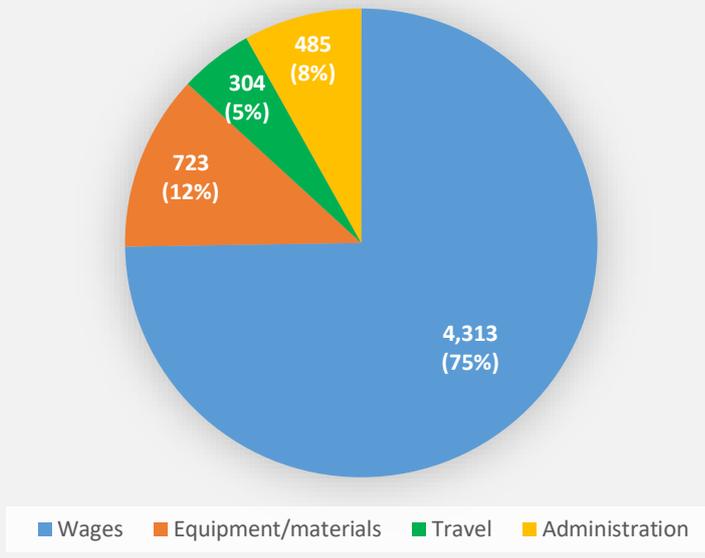


Figure 4.2. Summary of costs associated with the delivery of Life Education NSW in 2017/18 financial year

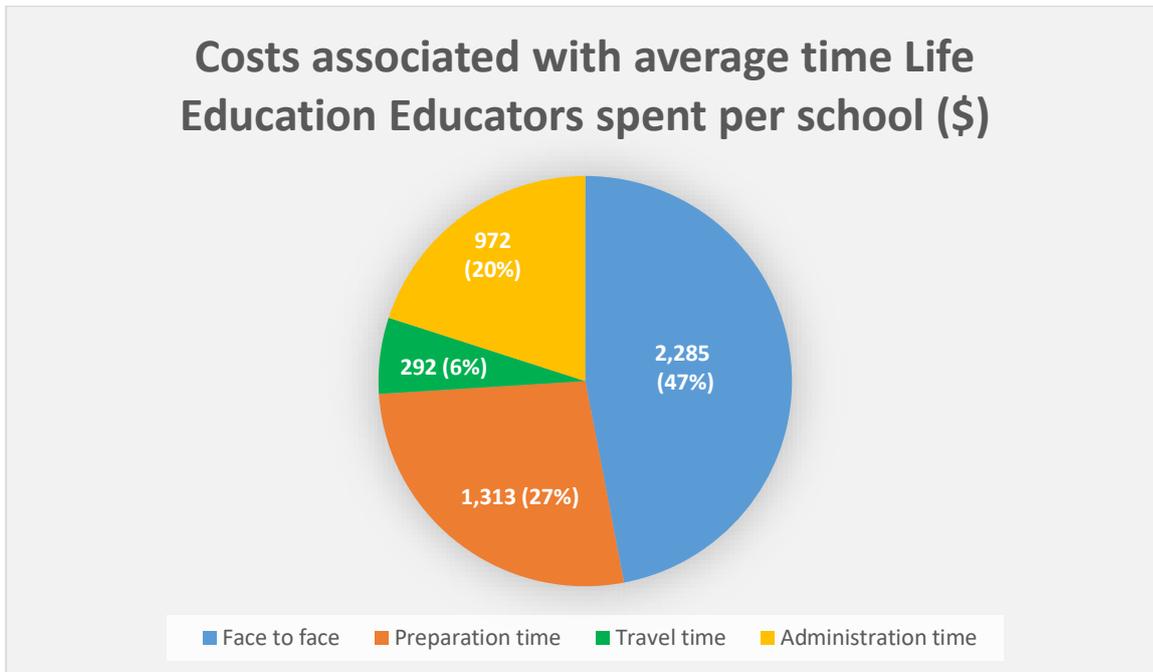


Figure 4.3. Costs associated with Life Education Educator average time spent in activities across schools

The total and mean costs per schools to deliver the Life Education Program by Year 5 Life Education modules from the public finance perspective, NSW Health perspective, socio-economic disadvantage and remoteness are shown in Table 3.

From the public finance perspective, the total cost to deliver any Year 5 Life Education module was \$1,349,368 (mean cost per school=\$1,339; 95%UI \$1,267, \$1,414) and the three Year 5 Life Education drug and alcohol modules of interest was \$753,284 (mean cost per school=\$1,288, 95%UI \$1,201, \$1,400). The total cost to deliver ‘On the Case’, ‘Think Twice’, and ‘Decisions’ was \$228,984, \$134,937, and \$389,363 respectively.

From the NSW Health perspective, the total cost to deliver any Year 5 Life Education module was \$472,279 (n=1008, mean cost per school=\$469, 95%UI \$443, \$495) and the three Year 5 Life Education drug and alcohol modules of interest was \$263,649 (n=585, mean cost per school=\$451, 95%UI \$420, \$490).

Table 4.3. Costs to deliver the Life Education Program in NSW in 2017/2018 financial year

	LE Program (N=1998)	Any Year 5 LE module (N=1008)	Year 5 LE drug and alcohol modules of interest (N=585)
	Mean (95% UI)		
<i>Public Finance Perspective</i>			
Total cost	\$5,825,000	\$1,349,368	\$753,284
By Year 5 drug and alcohol module			
'On the Case' module	-	-	\$228,984
'Think Twice' module	-	-	\$134,937
'Decisions' module	-	-	\$389,363
'It's Your Call' module	-	-	\$238,525
SEIFA			
Lower (≤ 990)	-	\$525,663	\$279,869
Higher (> 990)	-	\$823,705	\$473,415
Remoteness			
Major Cities	-	\$855,054	\$476,595
Inner Regional	-	\$328,028	\$187,639
Outer Regional	-	\$153,110	\$84,506
Remote/Very Remote	-	\$13,176	\$4,543
Mean cost per school	\$4,862	\$1,339 (\$1,267, \$1,414)	\$1,288 (\$1,201, \$1,400)
SEIFA			
Lower (≤ 990)	-	\$1,066	\$1,018
Higher (> 990)	-	\$1,599	\$1,527
Remoteness			
Major Cities	-	\$1,745	\$1,616
Inner Regional	-	\$1,055	\$1,117
Outer Regional	-	\$823	\$748
Remote/Very Remote	-	\$627	\$505
Mean cost per session	\$454	-	-
Mean cost per student	\$35 (\$33, \$37)	-	-
<i>NSW Health Perspective</i>			
Total cost	\$2,110,000	\$472,279	\$263,649
Mean cost per school	\$1,702	\$469 (\$443, \$495)	\$451 (\$420, \$490)
Mean cost per session	\$159	-	-
Mean cost per student	\$12 (\$12, \$13)	-	-

NB. UI=uncertainty interval; SEIFA= Socio-Economic Indexes for Areas, LE=Life Education; UI=Uncertainty interval.

Cost-effectiveness analysis

Effects

Primary outcomes

As reported in Chapter 3, there was no difference at 6 month follow up between intervention and control students for intentions to use tobacco, alcohol or other drugs in the future (Chapter 3).

Secondary outcomes

As reported in Chapter 3, at 6 month follow up students in the intervention group had significantly greater knowledge scores regarding tobacco (mean difference [MD] 0.47, 95%CI: 0.31, 0.63), alcohol (MD 0.39, 95%CI: 0.18, 0.61), and other drug use (MD 0.43, 95%CI: 0.18, 0.67) compared to the

control students (Table 3). There was no difference at 6 month follow up for student awareness or confidence to avoid outcomes.

Cost-effectiveness analysis

The cost-effectiveness analysis was conducted for the three statistically significant secondary outcomes: knowledge regarding tobacco, alcohol and other drugs. The calculated risk differences between the intervention and control group at 6 months are shown in Table 4.4.

Table 4.4. Risk differences of statistically significant student outcomes

	Intervention vs. Control Risk difference (95% UI)
Secondary outcomes	
Knowledge (score out of 5)	
Tobacco	0.47 (0.31, 0.63)
Alcohol	0.39 (0.18, 0.61)
Other drugs	0.43 (0.18, 0.67)

NB. UI=uncertainty interval.

The calculated ICERs were \$75 (95%UI \$53, \$120) per unit change in smoking knowledge score, \$90 (95%UI \$54, \$206) per unit change in alcohol knowledge score, and \$81 (95%UI \$49, \$206) per unit change in other drug knowledge score. The results from the cost analyses above, indicate that a mean investment of \$1,288 (95%UI \$1,201, \$1,400) per school is required to achieve the changes in knowledge scores reported in the effectiveness study.

Summary

This study aimed to undertake a cost-effectiveness analysis of the delivery of the Life Education Program in primary schools in NSW for the 2017/18 financial year in relation to the effectiveness of the Year 5 drug and alcohol modules on student outcomes. Data provided by Life Education NSW indicated that in 2017/2018 the cost to deliver the Life Education Program to 1998 NSW primary schools was \$5,825,000, of which \$753,284 was spent on the delivery of Year 5 Life Education drug and alcohol modules ‘On the Case’, ‘Think Twice’ and ‘Decisions’. From the NSW Health funding perspective, the cost to deliver the Year 5 Life Education drug and alcohol modules was \$262,116.

ICERs from the cost-effectiveness analysis ranged from \$75-\$90 per unit change in student knowledge scores. This result indicates that the Year 5 Life Education drug and alcohol modules are both ‘more expensive than no intervention’ and ‘more effective than no intervention’ for increasing

student knowledge of tobacco, alcohol and other drug issues and awareness of tobacco use norms in adolescents.

Strengths of this study include its comprehensive and rigorous approach in describing costs from both a public finance and NSW Health perspective, and cost-effectiveness analyses which appropriately accounted for any effects of clustering at the school and student level according to best practice health economic guidance of clustered trials.⁸

Limitations of the study include the retrospective nature of the analysis based on existing data rather than prospectively collected data and the provision of aggregated cost data at a state-level rather than delivery costs per school. Additionally, the lack of suitable student level data to enable calculation of quality-adjusted life-years, limited the study's ability to determine such benefits of the observed knowledge outcomes.

Finally, due to the aggregated nature of the cost data rather than individual school data, a number of assumptions were made in the calculations of costs per school. For example, for calculations of the weighted cost per school it was assumed that each session and each module had equal weighting in terms of costs. Similarly, aggregate data were provided for travel costs and it was assumed that travel costs to each school had equal weighting in terms of cost.

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**Chapter 5: Observation of delivery of Life Education drug and alcohol
modules in NSW primary schools**

Introduction

Pedagogy, otherwise known as the “art and science of teaching” acknowledges that what one teaches is inseparable from how one teaches, and thus together they impact on how students’ learn.¹ It is therefore essential that evidence-based lesson activities as well as teaching strategies are adopted when delivering content to students in any educational setting. However, it is widely acknowledged that school-based programs are rarely implemented with absolute fidelity to the planned content or teaching strategies of syllabus developers.² Adaptation of school programs, i.e. the process of modifying a program to suit a population or setting, can both be planned (i.e. prior decision to omit or adapt the program) and unplanned (i.e. made during program delivery).³ It is expected that school teachers do both, on a daily basis, as they adapt their lesson content and teaching strategies to meet the needs of their students.⁴ However, where external providers are delivering content to students, their ability to adapt lesson content or teaching strategies may be more limited, as they only have one opportunity to deliver the content to students face to face.

As reported in Chapter 2, Life Education Educators are provided with manuals that describe the content, lesson activities and teaching methods for use in the delivery of the ‘On the Case’, ‘Think Twice’ and ‘Decisions’ modules in schools. Each manual includes a list of lesson activities that can be delivered as part of the Life Education session. For each lesson activity the manual includes suggestions for the duration, teaching props, process for delivery and debriefing. All manuals include the following note regarding module delivery:

“It is acknowledged that there are many ways to use the audio visuals, sample session plans and teaching props. Therefore the learning activities, props and lesson plans in this manual are starting points to implement this module. Educators are encouraged to adapt them and to include relevant existing activities to meet the content of this module and the needs of students.”⁴⁸⁻⁵⁰

No previous evaluations could be identified that compared the planned Life Education program content and delivery strategies to the real-world delivery by Life Education Educators in schools, either of the Life Education Program overall, or of the Life Education drug and alcohol modules specifically.

Aims

The aims of this study were to:

1. Compare the delivery of Life Education drug and alcohol modules in New South Wales (NSW) to Year 5 students to the:
 - a. Lesson activities and teaching strategies outlined in the Life Education Educator manuals;
 - b. Best-practice approaches for education programs aiming to reduce risk-taking behaviours and promote healthy decision-making in school children;
2. Life Education Educator confidence, as perceived by an observer, in delivering the Life Education drug and alcohol modules.

Methods

Study design

An observational audit of the delivery of the Life Education drug and alcohol modules available for Year 5 students in 2018 was conducted in NSW government primary schools. The study was conducted in the context of the ongoing routine delivery of the Life Education Program in NSW. Two observational audits (in two separate schools) for each of the three modules were planned (n=6 audits).

Participants and recruitment

Schools

Eligible schools were NSW government primary schools with a Life Education booking in Term 4 2018, that had not been contacted to participate in the student survey component of the evaluation (n=47) and had a booking for one of the three Life Education drug and alcohol modules for Year 5 students ('On the Case', 'Think Twice', or 'Decisions'). The details of schools with Life Education bookings were provided by Life Education NSW.

The principals of all potentially eligible schools (n=47) were invited to participate via email which included an information statement and consent form. Two weeks following the invitation, non-responding principals were contacted to confirm study eligibility (i.e. 'On the Case', 'Think Twice', or 'Decisions' module booked for Year 5 students) and prompt consent. All potentially eligible schools were contacted until the quota of two participating schools for each of the three modules of interest was reached.

Students

Information packs were disseminated to parents regarding the planned observation of their child's Life Education session which included an information statement with study investigator contact details. An opt-out consent process was used, where parents were instructed to return the included consent form if they did not consent to the observation of their child's Life Education session.

Life Education Educators

In order to preserve the confidentiality of which schools the observations were planned to be undertaken in, all Life Education NSW Educators (n=47) were invited to participate in the study. Life Education NSW Educator information letters and consent forms were distributed and collated by the Life Education NSW General Manager and forwarded to researchers.

Data collection procedure

Observations of the delivery of the three Life Education drug and alcohol modules delivered to Year 5 (or Year 5 and 6 concurrently) students were conducted by a trained research assistant (observer), who was a University trained Teacher with six years teaching experience. Students were not observed during the audit and no data were collected from or about students during the observations. The observer was positioned at the front of the class to ensure their focus was on the Life Education NSW Educator only and not on the students. The observations of module delivery were conducted as live viewings using written transcripts made by the trained observer. For privacy reasons no video or audio recordings were used during the observations.

Measures

An observational audit recording tool (Appendix 5.1) was developed to collect data regarding the observed content and method of delivery of the Life Education modules for the assessment of alignment to the module manuals. The tool was developed to record information regarding observed lesson activities and teaching methods based on the content and suggested delivery of the 'On the Case', 'Think Twice', and 'Decisions' modules as described in each relevant Life Education Educator manual.⁵⁻⁷ The observational audit tool was piloted in a class not participating in the trial described in Chapter 3. No modifications to the audit template were required.

School and student demographic characteristics

The demographic characteristics (postcode and school size) of schools were sourced from the Department of Education NSW Master Dataset,⁸ and the Australian Curriculum, Assessment and Reporting Authority.⁹

Lesson activities observed for each Life Education drug and alcohol module

Items were included in the audit tool to record the details for each of the lesson activities observed. These included lesson activity name (if provided), description of the lesson activity content, resources or teaching props used, and teaching methods.

Perceived Life Education confidence in delivering Life Education drug and alcohol modules

An item was included in the audit tool for the observer to rate their observed perception of the Life Education Educator's confidence in delivering the Life Education drug and alcohol modules using a 5 point Likert scale ('1 – not at all confident' to '5 – very confident').

Data synthesis and analysis

School and student demographic characteristics

Participating school and student demographic characteristics (including comparison to all NSW schools) were analysed using descriptive statistics.

Lesson activities observed for each Life Education drug and alcohol module

Following the observations, all information recorded via the observational audit tool was entered into an electronic version. The lesson activities observed in each session were then categorised as:

- Lesson activity consistent with Life Education manual:
 - o assessed as the same as a lesson activity described in the Educator manual for that module;
 - o assessed as aligning to a learning outcome described in Educator manual for that module;
 - o assessed as demonstrating one or more of ten teaching methods described in either the 'On the Case', 'Think Twice' or 'Decisions' Educator manuals (including participation in games/puzzles, reading resources during the session, interactive activities on screen, educational videos, group activities, using workbook to answer questions, forming scenarios using their imaginations, use of role play, individual

answering of questions, and whole class discussions). These teaching methods, as confirmed with a representative from the Department of Education, align with interactive or experiential learning methods recommended to schools, and are also generally consistent with the student-centred interactive strategies outlined in the National Principles for School Drug Education guidelines.¹⁰

Categorisation of lesson activities was conducted independently by the observer and another researcher, and a third researcher resolved any disagreements.

The mean number and proportion of observed lesson activities consistent with Life Education manuals (lesson activities, learning outcomes and teaching methods) were calculated by module and overall, using descriptive statistics.

Perceived Life Education confidence in delivering Life Education drug and alcohol modules
Perceived Life Education Educators confidence were analysed using descriptive statistics.

Results

Sample

Schools

Of the 47 potentially eligible schools invited to participate, 28 (60%) were ineligible (due to: insufficient timeframe to undertake student consent procedures (n=19); module selection (n=3); planned module delivery was to Year 5 and other Year groups (n=6); 14 ineligible schools provided consent prior to determining eligibility). Of the 19 eligible schools, five (26%) declined to participate, nine (47%) were not able to be contacted, and five (26%) provided consent to participate.

Across the five participating schools, one observational audit was conducted for 'On the Case' and two observational audits were conducted each for 'Think Twice' and 'Decisions'. The characteristics of the five participating schools are reported in Table 5.1. The demographics of schools participating in the observation audit were similar to NSW government schools and those with a Life Education booking in 2018, with the exception of level of disadvantage and remoteness (Table 5.1).

Table 5.1. Demographics of participating schools, all NSW primary schools and NSW primary schools with Life Education booking

	Primary schools participating in the observational audit (n=5)	All NSW government primary schools (n=1,590)	Primary schools with 2018 LE booking (any module) (n=286)
School Demographics	n (%)		
School size			
Small (<300)	3 (60)	884 (56)	168 (59)
Large (≥300)	2 (40)	696 (44)	118 (41)
SEIFA			
Lower (≤990)	4 (80)	868 (55)	153 (54)
Higher (>990)	1 (20)	722 (45)	133 (46)
Remoteness			
Major Cities	2 (40)	866 (54)	138 (48)
Inner Regional	0 (0)	497 (31)	100 (35)
Outer Regional	3 (60)	210 (13)	45 (16)
Remote/Very remote	0 (0)	17 (1)	3 (1)

NB. LE=Life Education; SEIFA=Socio-Economic Indexes for Areas.

Students

No parents declined consent for observation of their child's Life Education session.

Life Education Educators

Of the 47 Life Education Educators invited to participate, 43 (91%) provided consent and 4 (9%) declined to participate. The Life Education Educators assigned to deliver the Life Education module in each of the 5 participating schools consented to participate in the observational audit.

Lesson activity consistent with Life Education manual

Across the five observations, the mean proportion of observed activities that were consistent with those in the Life Education Educator manuals ranged from 45% to 72% for the three modules (Table 5.2).

Table 5.2. Mean number and proportion of lesson activities observed by module

	On the Case ^a	Think Twice ^b	Decisions ^c
	n (%)		
Observed lesson activities from relevant manual	8 (62)	7.5 (45)	14 (72)
Number of learning outcomes aligned lesson activities observed	8 (73) ^d	7.5 (55) ^e	14 (85) ^f
Observed lesson activities not from relevant manual	5 (38)	9 (55)	5.5 (28)
Number of learning outcomes aligned lesson activities observed	3 (27) ^d	6 (45) ^e	2.5 (15) ^f
Observed lesson activities consistent with learning outcomes	6 (75) ^d	4.5 (90) ^e	4 (57) ^f
Observed lesson activities consistent with teaching method	6 (60)	4.5 (45)	7 (70)

^a1 school; ^b2 schools; ^c2 schools; ^d8 learning outcomes; ^e5 learning outcomes; ^f7 learning outcomes.

Of the 13 lesson activities observed for 'On the Case', eight (62%) were lesson activities from the Life Education Educator manual (Appendix 5.2). For 'Think Twice', 16 and 17 lesson activities were observed at each school; 44% and 47% of these were from the Life Education Educator manual respectively (Appendix 5.3). For 'Decisions', 15 and 24 lesson activities observed at each school; 47% and 88% of these were from the Life Education Educator manual respectively (Appendix 5.4).

Lesson activity aligned to learning outcome from Life Education Educator manual

Across all module observations, the proportion of learning outcomes from the Life Education Educator manuals for which at least one lesson activity was observed ranged from a mean of 57% for 'Decisions' to 90% for 'Think Twice' (Table 5.2).

Lesson activity consistent with teaching method from Life Education manual

Across the five module observations, 0-100% of the 10 teaching methods described within relevant Life Education Educator manuals were observed. By module, 6 (60%) teaching methods were observed for 'On the Case' and a mean of 5 (45%) and 7 (70%) teaching methods were observed in the 'Think Twice' and 'Decisions' sessions respectively (Table 5.2; see Appendix 5.5 for results by school by module).

Perceived Life Education Educator confidence in delivering Life Education drug and alcohol modules

The perceived confidence of Life Education Educators in the delivery of Life Education drug and alcohol modules was assessed by the observer as 'very confident' for all five observations.

Summary

The aims of the observational audit were to compare the delivery of Life Education drug and alcohol module lesson activities to the planned lesson activities and teaching strategies as described in Life Education Educator manuals.

In general, of the observed lesson activities, there was considerable variability in the proportion of lesson activities (55%-85%) consistent with those described in the Life Education Educator manual. Across all Life Education drug and alcohol modules, lesson activities were observed for the majority of the key learning outcomes for each relevant module (57%-75%). The proportion of observed lesson activities where teaching methods outlined in the Life Education manuals were demonstrated, also varied considerably between modules (45%-70%).

The Life Education Educator manuals state that the provided lesson activities, teaching props and lesson plans are only examples and that Educators are encouraged to adapt them and include other existing lesson activities relevant to the module content and needs of the students. It is unknown what impact this explicit advice to adapt modules had on the variability in observed lesson activities for learning outcomes.

The findings of this study should be considered in light of the following limitations. This study was limited by the small number of observations that were planned for this component of the evaluation. Whilst it is unclear whether these results are representative of the delivery of Life Education drug and alcohol module across NSW due to the small sample size, the demographic characteristics of participating schools, all NSW schools and all NSW schools with a Life Education booking were similar.

Whilst two observations of each the three Life Education drug and alcohol modules was planned, only five schools were able to be recruited from the remaining eligible schools. This was in part due to the limited number of eligible primary schools, following the extension of the sampling frame for the student outcome assessment (Chapter 3) to also include Term 3 2018. As a result, the findings for the 'On the Case' are only based on one school and comparison to delivery in other schools was not possible.

Finally, the observational audit was not able to assess any school-requested changes to plan Life Education module content as the requested Class Needs Analysis forms for schools were not available. As a result, it is unclear whether school requests to change the content of Life Education drug and alcohol modules contributed to the variability in observed lesson activities.

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**Chapter 6: School teacher use and perceptions of the
Life Education Program and resources**

Introduction

Assessing the reasons why and how the Life Education Program is selected by schools to deliver drug education to students, and how it is used and integrated in the curriculum by teachers, is important in understanding the potential for it to achieve its vision, aims and objectives.

Previous cross-sectional studies of the Program have reported on schools' use, satisfaction, perceived relevance and effectiveness of the 'On the Case' and 'Think Twice' modules and related resources. These studies have found that in those schools that have utilised the Program, a large majority of school teachers report use the Program resources, link the modules to their class curriculum, perceive the modules to be delivered to a high standard, and believe the modules are effective in improving knowledge. However, no previous evaluations have reported on the reasons why and how the Program is selected by schools, and school teacher and coordinator use or perceptions of the 'Decisions' module.

Aims

The aims of this study were to investigate school teachers':

1. Knowledge of school selection and booking of program modules;
2. Experience in consulting with Life Education Educators regarding drug and alcohol module content;
3. Use and quality of the delivery of drug and alcohol modules and related resources;
4. Attitudes regarding the Program and the delivery of drug education in schools;
5. Delivery of drug and alcohol lessons with their Year 5 students; and
6. Knowledge of parent involvement in the Program in their school.

Methods

Study design and setting

A cross-sectional study was conducted in NSW government primary schools involving a survey of Year 5 school teachers.

Participants and recruitment

Schools

Eligible schools were NSW government primary schools from the intervention group in the effectiveness study described in Chapter 3.

Teachers

All school teachers of Year 5 classes in the eligible schools were eligible to participate. The teachers were provided an information letter inviting them to participate in the survey and asked to provide their contact details (telephone number and email) and survey format preference (i.e. online or a paper survey).

Data collection procedure

Consenting teachers were invited to complete either the online or paper survey at least six weeks following the delivery of the Program module in their school to allow sufficient time for use of the Program resources in subsequent lessons. Two weeks following the survey dissemination, non-responding teachers were followed up (up to 5 times) by a trained interviewer, including an offer to complete the survey over the phone (via SelectSurvey).

Measures

The survey tool was developed on the basis of the information sourced from the desktop review component of the evaluation (Chapter 2) and in consultation with experienced teachers and the NSW Ministry of Health (see Appendix 6.1 for teacher survey).

School characteristics

Data regarding school postcode were sourced from the Department of Education NSW Master Dataset.¹

Teacher demographics

Teachers were asked to report: years of teaching experience and their level of accreditation based on the Australian Professional Standard for Teachers ('graduate teacher'/'proficient teacher'/'highly accomplished/lead teacher').

School selection and booking of program modules

Teachers were asked to report on which drug and alcohol education modules were selected, decision making processes for their selection, and how the Program sessions were funded.

Life Education Educator consultation regarding Life Education drug and alcohol module content

For each selected drug and alcohol module, school teachers were asked to report whether Educators consulted with them regarding the appropriateness of the content ('yes'/'no'), and whether they had requested any planned content not be delivered to their class ('yes'/'no').

Use and quality of drug and alcohol module resources

Teachers were asked to report which of the relevant Life Education drug and alcohol resources they were provided; used (either before or after the delivery of the Life Education module); and the perceived usefulness of these resource, using a 5 point Likert scale ('very useful'/'somewhat useful'/'unsure'/'not very useful'/'not at all useful').

Attitudes regarding the Program and the delivery of drug education in schools

Teachers were asked to report, using a 5 point Likert scale ('strongly agree'/'agree'/'undecided'/'disagree'/'strongly disagree') their attitudes regarding the Program: mode of delivery; alignment of content with curriculum requirements; impact on their skills and confidence in delivering drug education; perceived effectiveness of the Program on students; school model of funding module delivery; and future program bookings. Teachers were also asked to report on a 6 point Likert scale ('very effective'/'effective'/'undecided'/'ineffective'/'very ineffective'/'method not observed') the perceived effectiveness of the teaching strategies used by the Program Educator (e.g. use of role play, student workbook activities, and skills practice).

Delivery of drug education by Year 5 school teachers

Teachers were asked to report: on their delivery of teaching drug education lessons in 2018 for their Year 5 class before and after the module delivery ('yes'/'no'); whether they planned to teach their Year 5 students a drug education lesson before the end of 2018 ('yes'/'no'); and their confidence in teaching tobacco, alcohol and other drug education topics to their Year 5 class, using a 5 point Likert scale ('very confident'/'somewhat confident'/'neither'/'not confident'/'not at all confident'). Teachers were also asked to report whether they had taught any of the supplementary program lessons/activities either before or after the module delivery ('yes'/'no').

Parent involvement in the Life Education Program

Teachers were asked to report how information regarding the module delivery, and which program resources/services were provided to parents in 2018.

Statistical analysis

All analyses were conducted using SAS software V9.3.² School postcode, sourced from the Department of Education NSW Master Dataset,¹ was used to calculate socio-economic indexes for areas and remoteness of location.² Response options for each of the measures were dichotomised as follows; usefulness of Life Education resources ('very useful'/'somewhat useful' versus 'not very useful'/'not at all useful'/'unsure'), attitudes regarding Life Education program ('strongly agree'/'agree' versus 'undecided'/'disagree'/'strongly disagree'), observed teaching methods ('very effective'/'effective' versus 'undecided'/'ineffective'/'very ineffective'), and teacher confidence in teaching drug education to their Year 5 class ('very confident'/'somewhat confident' versus 'neither'/'not confident'/'not at all confident'). Participation rates, demographic data and responses to survey items were examined using descriptive statistics.

Results

Sample

In the 28 schools that participated in the effectiveness study (Chapter 3), there were 49 Year 5 school teachers, of which contact details were provided for 48 (range: 1 to 4 teachers per school). Of the 48 teachers, 41 (87%) completed the survey online (at least one teacher from 27 of the 28 schools). Reasons for non-participation included not attending the module delivery (n=2), unavailable (n=1) and refused (n=4). The demographic characteristics of participating teachers are shown in Table 6.1.

Table 6.1. Characteristics of participating Year 5 school teachers

Characteristics	n (%) ^a
Total surveys completed	41
SEIFA	
Lower (≤ 990)	20 (49)
Higher (> 990)	21 (51)
School Remoteness	
Major cities	25 (61)
Inner regional	11 (27)
Outer regional	5 (12)
Remote/Very remote	0 (0)
Years of teaching, mean (SD)	12.3 (9.6)
Years teaching at current school, mean (SD)	4.8 (3.4)
Level of Accreditation	
Graduate teacher	4 (10)
Proficient teacher	37 (90)
Highly Accomplished teacher	0 (0)

^an (%) reported unless otherwise specified; NB. SEIFA=Socio-Economic Indexes for Areas; SD=standard deviation.

School selection and booking of Program modules

Table 6.2 shows that across schools, 25 (96%) had previously booked delivery of a Life Education module, and 54% had an annual booking with set modules for each Year group. Most schools (72%) sought payment from parents to supplement the costs of implementing the Program. Alignment of the module with Personal Development, Health and Physical Education syllabus (76%), age appropriateness of the modules (76%) and the reputation of Life Education (59%) were important factors that influenced schools decision to deliver the Program.

Table 6.2. Selection and booking of Program modules (N=27 schools)

	n (%)
School previously booked LE ^a	25 (96)
School staff member who booked LE Program ^b	
Principal/Deputy Principal/Member of school Executive	9 (35)
Another teacher	8 (31)
Teacher of year 5 class (survey respondent)	4 (15)
Other school staff member	2 (8)
Office staff	1 (4)
Considerations by school in deciding in which Year groups receive Life Education ^b	
Annual booking with set modules for each year group	14 (54)
At the start of each year depending on the need of each year group	7 (27)
Biannual booking	2 (8)
Dependent on available external funding	1 (4)
Considerations by decisions makers for selected drug and alcohol modules ^{c,d}	
Alignment with PDHPE K-6 syllabus	19 (76)
Age appropriateness of LE modules for your Year 5 class	19 (76)
Tobacco, alcohol or other drug issues within your community	10 (40)
Particular needs of your Year 5 students	9 (36)
Recommendations from Life Education Educator	4 (15)
Funding of LE Program for Year 5 student in 2018 ^{c,d}	
Parents/guardians contributions	18 (72)
School contributes funds	12 (48)
Sponsorship/donation from community organisation/parent	3 (12)
School community fundraising	1 (4)
Factors influencing school decision to engage Life Education for drug education ^{c,e}	
Reputation of LE for delivering drug education	13 (59)
Alignment of LE drug education content with PDHPE curriculum	9 (41)
Evidence regarding the effectiveness of the LE program	8 (36)
Insufficient time within curriculum for teachers to deliver drug education	8 (36)
Lack of teacher confidence to deliver drug education lessons	2 (9)

^a1 school missing; ^b3 schools missing; ^cPercentages do not total 100% due to multiple responses; ^d2 schools missing; ^e5 missing; NB. LE=Life Education; PDHPE= Personal Development, Health and Physical Education.

Educator consultation regarding drug and alcohol module content

Between 27% and 35% of Year 5 teachers reported the Educator consulted them regarding the appropriateness of the content of the 'On the Case', 'Think Twice' or 'Decisions' modules prior to delivery of the module, with 4-6% of teachers requesting changes to a module (Table 6.3). Across modules, 57% to 76% of Year 5 school teachers observed the delivery of the 'On the Case', 'Think Twice' and 'Decisions' modules to their Year 5 class. Thirteen percent of teachers reported illegal drug content was not delivered as part of the 'Decisions' module.

Table 6.3. Consultation, requested changes and teacher observation of drug and alcohol modules (N=41)

Teacher responses	n (%)
On the Case	
Delivered to Year 5 class ^a	22 (55)
Educator consulted class teacher regarding appropriateness (N=22)	7 (32)
School requested changes to module content (N=22)	1 (5)
Delivery observed by Year 5 teacher (N=20) ^b	13 (65)
Think Twice	
Delivered to Year 5 class ^a	17 (43)
Educator consulted class teacher regarding appropriateness (N=17)	6 (35)
School requested changes to module content (N=17)	1 (6)
Delivery observed by Year 5 teacher (N=14) ^c	8 (57)
Decisions	
Delivered to Year 5 class ^a	24 (60)
Educator consulted class teacher regarding appropriateness (N=22) ^b	6 (27)
School requested changes to module content (N=24)	1 (4)
Delivery observed by Year 5 teacher (N=21) ^c	16 (76)
Content regarding illegal drugs (N=24)	
Delivered as part of the module	21 (88)
Not delivered, unsure why	3 (13)

^a1 missing; ^b2 missing; ^c3 missing; NB. Reasons for non-observance: absent on day, class covered by a casual teacher, at professional development that day, students attended Life Education at another school, not on class, box checked no reason provided.

Use and quality of drug and alcohol module resources

Table 6.4 shows the proportion of teachers that were provided, used and perceived the relevant drug and alcohol resources to be useful. The most commonly provided resources were the student workbook (84%), module content descriptions (73%), teacher lesson plans (73%), and teacher manuals (70%). Between 3% and 30% of provided resources were used before the module delivery, and 21% to 81% of provided resources after module delivery. Teachers' reported 36% to 95% of provided resources to be 'very/somewhat useful'.

Table 6.4. Provision and use of Program resources (N=37)

Resource	Provided ^a	Used/Accessed before visit ^b	Used/Accessed after visit ^b	Resources very/somewhat useful ^b
	n (%)			
Student workbook	31 (84)	1 (3)	25 (81)	22 (76) ^c
Teacher notes for modules	29 (78)	3 (10)	17 (59)	21 (91) ^d
Module content descriptions	27 (73)	8 (30)	7 (26)	23 (89) ^e
Teacher lesson plan	27 (73)	3 (11)	17 (63)	21 (88) ^f
Teacher manual	26 (70)	2 (8)	14 (54)	18 (95) ^g
Life Education website	24 (65)	4 (17)	5 (21)	19 (83) ^e
Access to teacher portal of website	21 (57)	3 (14)	9 (43)	14 (70) ^e
Life Education Snippets newsletter	14 (38)	2 (14)	7 (50)	7 (58) ^c
Parent resources	13 (35)	2 (15)	8 (62)	6 (55) ^c
Latest news	12 (32)	2 (17)	6 (50)	4 (36) ^e
Private Facebook Community group	12 (32)	1 (8)	6 (50)	5 (50) ^c
Mobile app	11 (30)	2 (18)	6 (55)	4 (40) ^e

^aPercentages do not total 100% as multiple response question; ^bOf those teachers who were provided each resource; ^c2 missing; ^d6 missing; ^e1 missing; ^f3 missing; ^g7missing.

Attitudes regarding the Program and the delivery of drug education in schools

The proportion of teachers that either strongly agreed or agreed with each statement regarding the Program are shown in Table 6.5. The majority of teachers agreed the Life Education Program content was relevant to the curriculum (89%) and understood by students (83%); and would make a positive impact on students' future health related decisions (83%). Seventy-eight percent of teachers reported that they would recommend that the school re-book the Life Education Program again.

Table 6.5. Teacher attitudes regarding the Program drug and alcohol modules

Statements	N	Agreement ^b n (%)
The content of the LE modules is relevant to the curriculum	36	32 (89)
I believe the LE program will make a positive impact on my students future health related decisions	35	29 (83)
The face to face mode of LE delivery to Year 5 students is effective in engaging students	36	30 (83)
The LE content is understood by the students	36	30 (83)
There is a good selection of LE modules to choose from	36	29 (81)
The LE program is needed in our school community	35	28 (80)
I will recommend that my school re-books the LE program in the future	36	28 (78)
The LE modules were delivered in an engaging way by the educator ^a	30	23 (77)
The cost of delivering LE to students represents value for money	36	26 (72)
There is a strong partnership between LE and participating schools	34	19 (56)
Working with the LE educator has helped me to include drug education in my own classroom lessons	36	17 (47)
It is appropriate for parents to pay for delivery of mandated curriculum by LE	36	12 (33)
It is appropriate for the school to pay for delivery of mandated curriculum by LE	35	11 (31)
The curriculum content that is currently delivered by teachers is sufficient without engaging external agencies to deliver drug education	36	9 (25)
External agencies should deliver drug education rather than school teachers	35	8 (23)
The LE program is not a good resource to support teachers	36	4 (11)
The LE program modules are not age appropriate	36	4 (11)
The teacher support resources do not complement the LE session	36	4 (11)
The educator did not appear confident in teaching the LE modules I observed ^a	29	3 (10)

^aOf those teachers who observed module delivery n=30; ^bStrongly agree/agree; NB. LE=Life Education.

Thirty-one percent and 33% of teachers thought it was appropriate for schools and parents to pay for the delivery of mandated curriculum by Life Education respectively, and 23% agreed external agencies should deliver drug education rather than school teachers (Table 6.5).

The number and perceived effectiveness of each of the teaching strategies utilised by Educators in their delivery of modules that Year 5 teachers observed is presented in Table 6.6.

Table 6.6. Observation and perceived effectiveness of Program teaching methods of those teachers who observed module delivery (N=30)

Method	On the Case (N=13)		Think Twice (N=8)		Decisions (N=16)	
	Observed	Effective ^b	Observed	Effective ^b	Observed	Effective ^b
Story telling	13 (100)	10 (77)	8 (100)	7 (88)	15 (94)	11 (73)
Digital and interactive tools on screen	13 (100)	11 (85)	8 (100)	6 (75)	16 (100)	13 (81)
Skills practice	10 (77)	8 (80)	7 (88)	5 (71)	15 (94)	11 (73)
Animated videos	13 (100)	9 (69)	7 (88)	6 (86)	16 (100)	11 (69)
Characters (actors)	12 (92)	9 (75)	8 (100)	7 (88)	16 (100)	10 (63)
Use of role play	12 (92)	10 (83)	8 (100)	6 (75)	16 (100)	10 (63)
Group work	13 (100)	10 (77)	7 (88)	5 (71)	16 (100)	10 (63)
Student workbook activities	12 (92)	8 (67)	6 (75)	3 (50)	15 (94)	9 (60)
Class answering questions aloud	12 (92)	11 (92)	8 (100)	7 (88)	15 (94)	11 (73)
Individuals answering questions aloud	13 (100)	11 (85)	8 (100)	7 (88)	16 (100)	12 (75)
Curriculum differentiation (i.e. tailoring of teaching methods to different student learning needs)	9 (69)	6 (67)	7 (88)	3 (43)	13 (81)	8 (62)
Provision of resources to read during the session	10 (77)	6 (60)	6 (75)	4 (67)	14 (88)	10 (71)
Use of puzzles/games	10 (77)	7 (70)	8 (100)	7 (88)	16 (100)	12 (75)
Use of their imagination to form scenarios	12 (92)	7 (58)	8 (100)	6 (75)	15 (94)	10 (67)

^bVery effective/effective

Delivery of drug education by Year 5 school teachers

Table 6.7 shows the prevalence of Year 5 teachers' delivery of drug and alcohol education in 2018 directly prior to and after Life Education module delivery. Thirty-two percent to 68% of teachers had delivered a drug education lesson on tobacco, alcohol or other drugs in 2018, and 22% to 27% reported they would deliver a lesson before the end of 2018 (Table 6.7). Supplementary lessons on any drug education topic were reported to be delivered by 11-14% of teachers prior to the module delivery, and by 11-46% of teachers following module delivery in addition to the module delivery by Life Education. A majority of teachers reported that they were confident to teach drug education topics to their Year 5 class (63%-78%).

Table 6.7. Delivery of drug education by school teachers in 2018 (N=37)

Response	Drug education lesson topics ^a			
	Tobacco	Alcohol	Other legal drugs	Illegal drugs
Lessons taught to Year 5 students by school teachers in 2018	25 (68)	20 (54)	20 (54)	12 (32)
Topics teachers plan to teach Year 5 class before end of 2018	10 (27)	9 (24)	9 (24)	8 (22)
Supplementary LE lessons/activities delivered to Year 5 students before LE visit by teachers ^b	5 (14)	5 (14)	6 (16)	4 (11)
Supplementary LE lessons/activities delivered to Year 5 students after LE visit by teachers ^c	17 (46)	12 (32)	7 (19)	4 (11)
Teacher confidence in teaching drug education topics to Year 5 class	28 (78) ^d	26 (77) ^e	20 (63) ^{f,g}	-

^aPercentages do not total 100% as multiple responses possible; ^b12 teachers reported not receiving supplementary lessons prior to Life Education visit; ^c5 teachers reported not receiving supplementary lessons after Life Education visit; ^d1 missing; ^e3 missing; ^f5 missing; ^gresponses covered both legal and illegal drug use; NB. LE=Life Education.

Parent involvement in the Program

Information regarding the Program was reported to be provided to parents at all schools and resources were reported to be provided to parents in 80% of schools (Table 6.8).

Table 6.8. Information and resource provision to parents (N=22 schools)

Response	n (%)
LE information provided to parents prior to LE visit	
Any information provided	22 (100)
Information in the school newsletter	20 (91)
Notes home to parents	17 (77)
Information given to P&C and other community groups	9 (41)
Via Skoolbag application	3 (14)
Other	2 (9)
LE resources provided to parents	
Any resource	20 (80)
LE website	12 (55)
Take home parent resources	7 (32)
Other	7 (32)
LE mobile apps	1 (5)
Parent information session by LE Educator	1 (5)

NB. LE=Life Education.

Summary

This study examined Year 5 teachers' experiences and attitudes regarding the delivery of Life Education Program drug and alcohol modules. Results of the study indicated the majority of schools deliver such modules annually for each Year group and seek parent contribution to fund its implementation. Approximately half of the teachers surveyed reported a program Educator consulting with them regarding drug and alcohol content of modules. The provision of program

resources to schools was reported to vary considerably (30%-84%), as did teacher use (55%-81%) and perceived usefulness of program resources (40%-91%). Generally, teachers had positive attitudes towards the Life Education Program drug and alcohol modules. However few agreed it was appropriate for schools or parents to pay for the delivery of mandated curriculum by Life Education (31% and 33% respectively) and that external agencies should deliver drug education rather than school teachers (25%). The majority of teachers perceived the Program teaching methods as effective, and most schools were reported to provide information and resources to parents.

Strengths of this study include the comprehensive assessment of school and teacher selection and use and perceived quality of the Life Education Program across three drug and alcohol modules available for Year 5 students. Additionally, the study achieved a high participation rate of almost 90% of eligible Year 5 school teachers. The study results were similar to those reported in a previous national evaluation of the Life Education Program with respect to Educator consultation on module content and use of Life Education teacher or student sources.^{3,4}

The findings should be viewed with respect to a number of study limitations including the study sample only including schools with a current Life Education booking. Additionally, the cross-sectional nature of the study limits the ability to determine what impact teacher use or non-use of Life Education resources had on student outcomes.

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**Chapter 7: Life Education staff perceptions of the
delivery of the Life Education Program in NSW**

Introduction

To understand the impact of the real-world delivery of public health programs it is important to seek the views of those responsible for program delivery regarding: the factors that may enhance or hinder such delivery; the adaptations that are made to program delivery; and the Program quality assurance and monitoring processes that are in place. No previous reports were identified describing such perceptions of Life Education Educators regarding the delivery of the Life Education Program.

Aims

To qualitatively describe the perceptions and attitudes of Life Education Administrators and Educators regarding the design and delivery of the Life Education Program in New South Wales (NSW).

Methods

Study design and setting

Semi-structured telephone interviews were conducted with a sample of Life Education Administrators (NSW and Australia) and Educators (NSW only).

Participants and recruitment

Life Education Administrators and Educators responsible for delivering Life Education modules whose contact details were provided by the Chief Executive Officer of Life Education were eligible to participate.

All identified Administrators (n=17) were invited to participate. All identified Life Education Educators (n=43) were randomly ordered and invited to participate.

Data collection procedures

An experienced interviewer trained in qualitative interviewing techniques¹ conducted semi-structured telephone interviews. Interviews were recorded using Zoom Video Conferencing or a digital voice recorder where Zoom Video Conferencing was not feasible,²⁻⁴ and written notes taken. If participants declined consent for their interview to be recorded, only written notes were taken.

All interview recordings were transcribed into an electronic document along with any written notes.² Participants were offered the opportunity to review their interview transcript and to return any corrections or additional comments within five days.⁴

Measures

Interview questions were developed by the research team (Appendix 7.1) in consultation with the NSW Ministry of Health. Of 21 interview questions, 9 were asked of both Administrators and Educators, 6 were for Administrators only and 6 were for Educators only. Questions were grouped in subtopics to ensure a natural flow for discussion⁵ and addressed Administrators' and Educators' perceptions and attitudes regarding:

- Life Education Program delivery in NSW including factors that hinder/enhance program delivery and impact, standardised aspects of delivery, adaptations, quality indicators, training of Life Education Educators, and strategies for equitable access, and increased uptake and reach of the Program;
- Future directions for school-based drug and alcohol programs.

Analysis

Participant responses to each question were narratively synthesised.

Results

Sample

Of the 60 Life Education Administrators and Educators, 7 were out of scope (e.g. no longer worked for Life Education, on maternity leave) and 53 were invited to participate, 9 of whom declined, 23 were not able to be contacted and 21 participated in the interviews (40% response rate; 12 educators, 9 administrators). The characteristics of participants are shown in Table 7.1 below.

Table 7.1. Participant characteristics

Characteristics	Administrators (N=9)	Educators (N=12)
	n (%)	
Duration of working with Life Education, mean (years)	9.3	11.3
0-5 years	5 (56)	5 (42)
6-10 years	1 (11)	2 (16)
>10 years	3 (33)	5 (42)
Life Education Educator qualifications		
Certificate/Diploma	-	2 (17)
University degree	-	10 (83)
Life Education Educator regions		
Hunter/Central Coast	-	3 (25)
Sydney	-	6 (50)
North Coast	-	1 (8)
ACT/South Coast	-	1 (8)
Riverina	-	1 (8)
Educator delivery of Year 5 Life Education drug and alcohol modules in 2018		
'On the Case'	-	9 (33)
'Think Twice'	-	9 (33)
'Decisions'	-	9 (33)

NB. ACT=Australian Capital Territory

Of the 21 interviews, 20 were audio recorded and 1 was recorded using written notes only. Mean duration of interviews was 38 minutes (range: 23 to 75 minutes).

Life Education Program delivery in NSW

Factors that hinder or enhance program delivery and impact

Life Education staff identified a number of factors that hinder the delivery of the Life Education Program including: the cost to schools and parents to implement the Life Education Program; children not receiving the intended dose of the Life Education Program (e.g. sessions cut short or pre or post-visit activities not implemented); schools believing they already deliver required drug education curriculum adequately; schools selecting Life Education modules without drug and alcohol content; distance required for Life Education staff to travel to some schools; and logistic issues related to physically getting the mobile learning centre on to a school site.

“Sometimes it can be cost because we are obviously a non-for-profit organisation. Cost can sometimes effect getting schools coming on annually. We get a lot of bi-annual schools because of cost.”

"I think sometimes hindering impact is we don't get 100% attendance from the class. And whether that is because someone is sick, somebody is on holidays away that day or the parents can't afford it."

"the follow up work is important...we provide classes with the workbooks and ...during our lesson we mentioned the workbook, we mentioned the follow up activities just so that it is used. The online follow up activities. So I guess that is a hindrance if the teachers tend not follow up. Because we do like it to be whole, like a not just a one-off visits, we do want that learning to continue"

"we cover so much of the curriculum in our lesson. Or if the pre visits and post visits are utilised as well, um it just covers a big chunk of their curriculum. So its stuff they don't have to be teaching later in the year."

"schools believe that they are already covering enough in their own curriculum"

"we have a couple of schools we physically we can't get the vans in"

Factors reported by Life Education staff which hinder the delivery of drug and alcohol programs generally were cost, especially in rural/remote areas; school/community attitudes regarding relevance of drug and alcohol programs in their community; consent to participate from parents who smoke or drink alcohol; and misinformation from parents regarding drug and alcohol issues.

"Sometimes some communities out there or some schools might already have a negative image or values on these drugs or don't see it a relevant a problem in their area"

"sometimes parents are really fearful of their children to come into the smoking program because they know once it's over their child is going to go home and say "Healthy Harold said smoking is bad for you, don't smoke"

"You know there is children that have told me that there are safe ways that a person can smoke and safer things, safer cigarettes, healthier cigarettes that adults can smoke"

Life Education staff identified a number of factors that enhance the delivery of the Life Education Program including: strong history and brand awareness of Life Education; unique Life Education learning experience including positive teaching style and delivery methods such as theatrical aspects of lessons, and use of technology; the alignment of the Life Education Program to the NSW Personal Development, Health and Physical Education curriculum; the experience, training and support provided to Life Education Educators; provision of parent resources; centralisation of some program aspects (i.e. national training managers and national program development); and Life Education support schools to identify funding for Life Education Program implementation.

"...I just feel we are sort of iconic. We are part of the education system"

"Healthy Harold is still a large part of primary schooling"

"Look I think the caravan themselves are a huge enhancement to running the program. They are just so fun. The kids love it, it's something different"

"The teachers love it, the kids love it, you are always a fun thing, you are always a positive thing"

"So our main focus is on the PDHPE curriculum in the schools. And we support the teachers and enhance their programs, what they're already doing with their classes in the schools"

"Opportunities come up when we receive funding from different sources and if it's local funding we would then use that as an opportunity to talk to a school to say hey we have got this funding...that would enable us to deliver this cheaper for you"

Factors reported by Life Education staff which enhance the delivery of drug and alcohol programs more broadly were an awareness of the local community context and need to tailor programs accordingly; having a third party deliver drug and alcohol education with specialist knowledge regarding drug and alcohol; positive teaching methods focused on teaching students about how drugs and alcohol affects the body; empirical evidence of the effectiveness of drug education programs; and multi-strategy programs that involve parent or other components.

"I think what really helps is if you are able to have a dialogue with the school before you get there. If they have chosen those particular programs. Um so that you have bit of background knowledge about maybe, you know the kind of social circumstances surrounding the schools. What the communities like"

"the problem is I think is that drug use is very hard to talk about for the teachers because they have built up this rapport all year and they don't know how to tackle the drug situation, but they know they need to. So as a third party coming in and talking with them about drugs, I guess the teachers can kind of relax a little bit"

"Our programs are all about empowering those kids to actually make their own choices in the future, about what goes into their body"

"We educate the children on body parts and our systems. We actually educate them on how these drugs go into the body, and how and what it does to the body. Which I think is very positive for the children to learn about their body and how these drugs can affect the body. Instead of coming in and saying you shouldn't do this and you shouldn't do that, which puts a more negative output on things. Where I think if they have more education on how things work and what goes in, it seems to be a lot more positive teaching for the children to understand their bodies"

"Everyone working together enhances the message"

Standardised program delivery

All Life Education staff agreed that the Life Education Program is delivered in a standardised way, at least in part. The reported aspects of the Life Education Program that were considered to be standardised were: specified learning outcomes, provision of key information and resources for each module; NSW program delivery guidelines; 10 week full time training program for Educators; educator performance reviews; and role of Education Managers in monitoring Life Education program delivery. The way that the Life Education Program is delivered by Educators in classrooms was reported by all Educators to not be standardised due to differences in teaching styles and techniques between Educators.

“You know we have a training program where we have check lists and we have certain things that we need to cover. So in that regard we know when people come through training they are all getting that same information”

“Now not everyone does it in exactly the same way, but I think the expectation is that there are, that they need to those objectives need to be covered. And we do sort of have example lesson plans and example activities and resources. So our resources are all standard.”

“we all have all the same content and resources but use our own unique personality to make it fun and engaging”

“Every educator delivers the programs differently according to their personality but still covers the same content. It’s a same same but different approach as we are all different individuals and some work for some and other things don’t”

“I would say it fairly standardised but it is all taught in a different way”

“And then within NSW team I think they are called education managers that oversee educators in their area. So there is constant assessment to see if educators are delivering the right resources, the right messaging in the most appropriate way, that they are working with the curriculum, using best practice”

Adaptations to the delivery of the Life Education Program

Adaptations to program delivery were reported to be commonly made, with the need for such adaptations either explicitly assessed prior to delivery of the Life Education Program in schools (planned) or during program delivery (unplanned).

Educators reported that planned adaptations were made on the basis of: school community demographics (e.g. cultural backgrounds, religion); drug and alcohol issues in the school or community (e.g. student marijuana use); special needs of children in class; class size; and teacher requests based on class needs.

Unplanned adaptations were made by Educators on the basis of: special needs of children in class; time constraints; teacher requests; and any issues or questions that students bring up during the session.

Planned and unplanned adaptations were reported to include: omitting planned content of Life Education activities (e.g. teacher request to not deliver illegal drug content), modifying planned content (e.g. using tactile resources for visually impaired students), adding additional content from other modules (e.g. teacher request to include alcohol content in tobacco module), and development of resources with consideration of different population groups (e.g. 'On the Case' includes Aboriginal adults and children).

"we have our bag of tricks for all our activities we can run. If we are running ahead of time there is activities we can throw in. And these are all activities that correlate with what we are teaching. And if we are running overtime, what I do with my lesson plan is I try and prioritise the information. So that if we do run short of time that the most important things have gotten through to them, as opposed to leaving the most important things to last."

The large majority of Educators reported that changes to Year 5 Life Education drug and alcohol modules were 'rarely if ever requested' (88%, 100% and 96% of educators for 'On the Case', 'Think Twice' and 'Decisions' respectively). Example of changes requested to these modules by schools included omitting illegal drug content from the 'Decisions' module and including reference to culturally appropriate drugs within the 'On the Case' module (e.g. referring to smoking shisha requested in an Islamic school).

Life Education administrators described the Life Education Program as being developed using an 'active approach' to curriculum development, methodology, resources, training and delivery using inclusive language and 'reasonable' measures to ensure the content is developed taking account of the diversity of students, backgrounds and learning styles. Educators are provided with professional development for cultural sensitivity and Indigenous trainers provide information about cultural diversity and awareness of program delivery in Indigenous populations.

Administrators reported that Life Education has recently focused on developing Aboriginal and/or Torres Strait Islander resources and materials in different languages. Resources developed for

Aboriginal and/or Torres Strait Islander students have been developed for the 'On the Case' module, including resources describing Indigenous elders and smoking ceremonies, and 'Indigenous branded' stickers that are given out with student workbooks. Administrators reported these resources were developed with Aboriginal organizations, Aboriginal community health groups, and Aboriginal educators.

"we have what you would call an active approach to curriculum development, our methodology, our resources and our training. And within our delivery, we use inclusive language, where we can. We take reasonable measures to ensure the content is developed to take account of respecting the diversity of students and their backgrounds and their learning styles"

"We are continually promoting resources to educators and providing them with professional development opportunities. For example we had Indigenous trainers come and speak to our educators about cultural diversity and awareness within our program delivery in Indigenous populations"

"...there have been some particular emphasis on creating Indigenous resources... and specifically focusing on the special need of the Indigenous communities. Plus we have also looked at developing programs for by providing some of the material in multiple languages for another of different cultures"

"As an example, with our On the Case - tobacco education module we develop additional resources to build the capacity of Life Education educators to deliver tobacco education to Aboriginal and Torres Strait Islander children in upper primary schools across Australia. Development included consultation with relevant organizations, Griffith Aboriginal Community Medical Service, NSW, Tackling Indigenous Smoking & Healthy Lifestyles, VIC, Institute for Urban Indigenous Health, QLD and schools in NT. We used indigenous talent across print and digital media"

"to give you an example the tobacco module has tailor made Indigenous resources...they are beautiful resources and they actually resonate across cultures as well. It's centred on... Indigenous elder and the smoking ceremony and so it's quite beautiful and it's quite a good

story that's relatable across all cultures. So we find that's a resources we use regardless of makeup of the class"

"so just for an example some of the stickers that we give out - we have Indigenous branded stickers to go out to the kids with the workbooks"

Training and support

All participants reported receiving training and support during 2018. Such training and support involved: an annual three day conference; ongoing online professional development training; access to an online learning system; access to a 'Workplace app'; and opportunities to observe other Educators.

"I feel very comfortable with the job and the people I have around me. I just feel like I can relax. If anything does pop up that I hasn't come up. I feel like I have got a really good support network around me to help me with it. Even though they are so far away"

Quality indicators or processes to monitor quality of delivery

Administrators reported that the Life Education Program is delivered in NSW according to NSW quality delivery guidelines. A performance review system implemented approximately 12 months ago, called 'Grow, Perform, Succeed', involves observation and assessment of Educators delivering the Life Education modules against a standard performance checklist of outcomes. Administrators reported that Educators are provided with feedback as part of this process and if not meeting standards are re-assessed three months later. New Educators were reported to be required to meet program these standards as part of their initial 10-week training before delivering a Life Education module.

Educators reported that are required to undertake a prescribed amount of professional development each year to 'keep their accreditation' which is delivered via an annual conference, webinars, and other online learning opportunities.

Equity strategies to ensure program access by all schools

Administrators reported a number of strategies implemented in NSW to ensure all schools have equitable access to the Life Education Program, including: obtaining grants and funding for socio-

economically disadvantaged schools; using inflatable classrooms in rural/remote areas to reduce cost of towing mobile learning centres; 'adopt-a-school' program linking schools with local business to fund Life Education program delivery; and a flexible fee structure including off peak rates at a 50% reduced fee.

"we apply for and are very successful in getting funding which allows us to very heavily subsidise access to the program um throughout NSW"

"We often get funding through you know clubs NSW or councils or from industry that covers the cost of the program being delivered in its entirety"

"So we found that through targeted fundraiser last year we were able to increase our low ICESIA schools by 17% in the calendar year last year"

Strategies to increase uptake and reach of Life Education in NSW primary schools

Strategies reported by Administrators that are implemented within NSW to increase reach and uptake of the Life Education Program included: raising local community and school awareness of the Life Education Program (e.g. community events, direct contact with schools without Life Education Program booking, information to all schools regarding new modules); national and state marketing strategies to increase Life Education profile (e.g. social media, education seminar presentations, engagement with education sectors); explicit partnership and marketing roles of Life Education staff (e.g. Education Director, Preschool Development Officer, Media and Communications staff); development of marketing materials that describe how the Life Education Program can assist schools to meet requirements (e.g. Personal Development, Health and Physical Education curriculum); and identification of strategies to address schools barriers (e.g. subsidies, funding for socio-economically disadvantaged schools).

"There's ongoing marketing which is supported from a national level which goes out on our website and social channel"

Future directions of school-based drug and alcohol programs

Strategies to strengthen school-based drug and alcohol program delivery

All Life Education staff described strategies they viewed would strengthen the delivery of the Life Education Program specifically. Suggested strategies included: increased funding for the Life Education Program to increase program reach; continual improvement and updating of Life Education drug and alcohol modules based on current evidence; continuing to encourage schools to select Life Education Program drug and alcohol modules irrespective of whether schools believe drug and alcohol use are issues in their community, evidence of declining prevalence of drug and alcohol use, and any drug and alcohol curriculum delivered by teachers; addition of web-based delivery methods and booster sessions; effectiveness studies to assess the Life Education Program's impact on drug and alcohol use; and encouraging and supporting schools and teachers that book the Life Education Program to use the provided Life Education resources for students to receive full dose of the Life Education Program.

"extra funding ... so we can reach more students"

"...we always need to change our programs and we always need to update our programs because of the alcohol trends or the smoking trends out there, or the drug trends out there are always changing in the community. What happened say 40 years ago is different to what's happening today in communities"

"...not as many young people are smoking, but we shouldn't stop sending the message out"

"if they are not having Life Education they are actually not covering the alcohol, tobacco and other drugs very well in their programs"

"we encourage the teachers to start teaching and using resources that we provide them... before and after the program"

"I mean best practice says that teachers are best placed to deliver drug education to their students. And we absolutely agree with that and that's why we have never been a one-off intervention. We also provide support for teachers and the one – one and half hours we are there face to face with students, we are expecting teachers to do 10 hours or 8-10 hours on top of that. it's helping them navigate the resource. But it's having that different experience"

an enriching teaching and learning experience that they can't provide. A unique experience for students"

How Life Education should respond to increasing number of school-based drug and alcohol programs

Administrators perceive the Life Education Program to be a 'trusted brand' with 40 years' experience in delivering drug education that is aligned to curriculum, designed to be implemented annually, and includes additional lessons after the visit and more substantial than other available programs. Strengths of the Life Education Program cited by Administrators included close alignment with the Department of Education; demonstrable alignment to curriculum; and provision of 'human resources' that support teachers in schools. Administrators suggested Life Education should respond to increasing numbers of school-based drug and alcohol programs by staying relevant and modern, using teaching and pedagogy that impacts the way students want to learn now, and continuously improving and meeting the needs of teachers and schools.

"One of the thing that life ed certainly has in its favour is that because we have been doing it for a while and been closing aligned with the department of education we can show very clearly the teachers how our program will meet the curriculum requirements that they have"

"I think that we need to stay modern and make sure that use teaching and pedagogy that impacts the way students want to learn now"

"we are a trusted brand in schools and we have a 40 year history and that is recognised"

Summary

Life Education staff described various factors that hinder, such as cost to schools and parents, and less than intended dose of the Life Education Program, and enhance, such as Life Education brand awareness and alignment to curriculum, the delivery of the Life Education Program in NSW were cited. The student learning outcomes and resources for each module and delivery guidelines were cited by Life Education staff as standardised aspects of the Life Education Program, whereas delivery of the Program between Educators was not. Planned and unplanned adaptations to program delivery, such as omitting or modifying content, are common including on the basis of school community demographics; special needs of children; and teacher requests.

All participants reported receiving training and support during 2018 and processes including quality delivery guidelines and an educator performance review system are in place to monitor delivery. Strategies designed to enhance equity, uptake and reach of the Life Education Program are in place including those explicitly for socio-economically disadvantaged schools.

Life Education staff suggested various strategies to strengthen Life Education program delivery including increased funding, web-based delivery and booster sessions, effectiveness studies, and increasing school use of Life Education resources to ensure intended dose of the Program is received. Administrators suggested Life Education needs to stay relevant and modern, by using teaching and pedagogy that impacts the way students want to learn now, and continuously improve and meet the needs of teachers and schools in response to increasing numbers of school-based drug and alcohol programs.

Strengths of this study includes the identification of factors that hinder or enhance, and strategies to strengthen the delivery of the Life Education Program, from the staff that are directly responsible for implementing the Life Education Program across NSW. It is anticipated such information will be particularly relevant to Life Education in future strategies to improve the delivery of the Program in NSW.

Limitations of the study include a lower than anticipated participation rate of Life Education staff of 40% which may have impacted on the generalisability of the findings. However, the consistency of responses across participants for interview questions suggest any impact may be minimal.

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Appendices

Chapter 1

Appendix 1.1. Effectiveness of substance use prevention programs*

Study	Number of studies	Type of study	Primary (Years 1 to 5)	Early adolescence (Year 6 and 7)
Onrust et al.	288	SR MA	Tobacco: effective Alcohol: effective Substance use: effective	Tobacco: effective Alcohol: effective Substance use: effective
Champion et al.	10	SR	Not evaluated	Tobacco: effective Alcohol: effective Substance use: effective
Teesson et al.	7	SR	Not evaluated	Not evaluated
Foxcroft et al.	53	SR	Tobacco: Not evaluated Alcohol: effective Substance use: Not evaluated	
Lemstra et al.	6	SR	Not evaluated	Tobacco: Not evaluated Alcohol: effective Substance use: effective
Porath-Waller et al.	15	SR MA	Not evaluated	Tobacco: Not evaluated Alcohol: Not evaluated Substance use: effective
Faggiano et al.	29	SR MA	Tobacco: Not evaluated Alcohol: Not evaluated Substance use: effective	
Soole et al.	58	SR MA (12)	Tobacco: Not evaluated Alcohol: Not evaluated Substance use: effective	
Skara & Sussman	25	SR	Not evaluated	Tobacco: effective Alcohol: Not evaluated Substance use: effective
Gottfredson & Wilson	94	MA	Tobacco: Not evaluated Alcohol: No effect Substance use: No effect	Tobacco: Not evaluated Alcohol: Effective Substance use: Effective
Cuijpers	12	SR MA	Not evaluated	
Tobler et al.	207	MA	Tobacco: Not evaluated Alcohol: Not evaluated Substance use: Effective	Tobacco: Not evaluated Alcohol: Not evaluated Substance use: Effective

*Table adapted from Healthy Lifestyle Choices in Children¹; NB. SR=systematic review, MA=meta-analysis.

1. Toumbourou J, Rowland B, Renner H, Hobbs T. Healthy lifestyle choices in children: an Evidence Check rapid review brokered by the Sax Institute for the NSW Ministry of Health 2016.

Appendix 1.2. Previous Australian evaluations of the Life Education Program

Author/year Funder Study type	Population/ setting/ participants	Intervention / Comparator	Outcomes	Intervention effects
Gould 1985 ¹ Funding unknown Cross sectional study	55 Sydney Primary Schools (attending LE static centre at Potts Point) 105 teachers telephone interviews by a market research company	Intervention: randomly selected LE schools Control: n/a	Outcomes NR Overall aim was to investigate the quality and appropriateness of the Centre's programs and materials and judging the benefits to teachers	Teacher outcomes: <ul style="list-style-type: none"> - 57% reported the LE visit was better than their expectations - Overall teachers reported spending an average 4hrs 10mins on pre-visit activities (types of activities NR) - Major post-visit activities were use of activity booklets (35%), discussions (33%), paintings/craftwork/posters (27%), diet and food groups (20%) and body parts (19%) - 93% indicated that LE complemented their Health studies class - 36% reported LE was extremely helpful in planning Health Studies class (36% quite helpful, 20% helpful) - 90% report LE was helpful as an aid to implementing Health Studies - 50% reported it was extremely helpful as a reinforcer of classroom activities - 97% reported that would refer the program to a colleague
Goodwin & Nelson 1987 ² Funding unknown – carried out by LE Secondary analysis of teacher evaluation surveys	1163 teacher evaluation surveys completed between 1979 and 1987 Survey were completed immediately following the LE session	Intervention: LE schools Control: n/a	Outcomes NR Overall aim was to examine teachers' responses to the program and its compatibility with personal development programs	Teacher outcomes: <ul style="list-style-type: none"> - 69% of responding Year 6 teachers rated LE as an excellent program - 53% of responding Year 6 teachers rated the content excellent - 92% of responding Year 6 teachers rated students' understanding of program concepts as good or excellent - 97% of all responding teachers were willing to bring their class each year - 43% of responding teachers involved their students in pre-visit work (proportion for post-visit work NR) - 98% of responding Year 6 teachers indicated that their local needs were met - 97% of responding teachers considered the LE program complemented their own personal development program
Health Department Victoria 1986 ³	7 Victorian Primary Schools	Intervention: LE schools Control: n/a	Outcomes NR Study reviewed the operation of the LE program in Victorian schools against a	"The study, whilst broadly finding that the LE was consistent with the guidelines, reported that "Teachers were in favour of LE as a useful and high quality resource" which "may have served as a stimulus for drug education ... [although there was a] lack of integration into health education."

Funding unknown – carried out by Health Department Victoria Cross sectional study			list of 7 key principles for drug education	
Stephenson 1988 ⁴ Funding unknown Pilot study – non-randomised	Sydney Primary Schools: - Intervention=22 schools - Control=NR 2336 Year 5 and 6 students - Intervention=1044 - Control=1292	Intervention: LE schools Control: randomly selected by the NSW Drug and Alcohol Authority from Sydney schools participating in the 1986 statewide survey not receiving LE	Student outcomes: - Knowledge - Change in student attitudes - Expressed behavioural intentions - Alcohol and smoking behaviours of students	Student outcomes: - **LE students more likely to belong to the ‘high’ drug knowledge group - **LE students were significantly more likely to identify problems with drinking, analgesics and drunk driving - No effect on smoking attitudes - No effect on students behavioural intentions to smoke or drink - “overall, children in the LE group are less likely to smoke*, but no such differences were evident with drinking behaviour” *It effect was confined to boys' smoking
Quine 1992 ⁵ Funding unknown Cross sectional study	Sydney Primary Schools: - Intervention=22 - Control=NR 2336 Year 5 and 6 students - Intervention=1044 - Control=1292	Intervention: LE schools Control: randomly selected by the NSW Drug and Alcohol Authority from Sydney schools participating in the 1986 statewide survey not receiving LE	Outcomes NR Study aimed to report on program recall, understanding and enjoyment	Student outcomes: - 91% of students vividly recalled the visit - 82% of students indicated a high level of enjoyment. - The most frequent purpose of participation given by students was “to learn about ourselves” (30%) - 89% of students reported the main message of the LE program was to “know how drugs change the way our bodies work” and “how the body works”
Hawthorne 1992, 1995 & 1996 ⁶⁻⁸ Funded by Victorian Health Promotion Foundation and Life Education	86 Victorian Primary Schools Year 6 students (aged 11-12 years): - Intervention=1721 - Control=1298	Intervention: exposed to LE program modules over 5 consecutive years Control: conventional school-based drug education curricula NB. Not reported which LE modules students exposed to	Student ‘short-term’ outcomes: - Tobacco use – ever, last month - Alcohol use – ever, last month, misuse - Analgesic use – ever - Knowledge scores - Attitudes towards drug use	Student outcomes: - **Intervention students were more likely to have smoked, consumed alcohol and/or used analgesics than control students - No effect on any other tobacco or alcohol use outcome - **LE students obtained significantly higher knowledge scores than non-LE at both the student and school level - **LE students had significantly higher attitudes towards drug use and health when analysed at the student level but not at the school level - **LE students had significantly lower attitudes towards other drug users at the student level but not at the school level

<p>Quasi-experimental controlled trial</p>			<ul style="list-style-type: none"> - Attitudes towards other drug users <p>NB. 'Short-term' length of follow up not defined</p> <p>School/teacher outcomes:</p> <ul style="list-style-type: none"> - Receipt of health or drug education - Use of health or drug education curriculum materials - Teaching PDHPE lessons - Attitudes about the LE Program - Use of LE lessons 	<p>NB. Post-hoc analyses estimated population prevalence estimates/population attributable risk percentage for Year 6 tobacco and alcohol use similarly reported no preventive effect of participation in LE</p> <p>School/teacher outcomes:</p> <ul style="list-style-type: none"> - No difference between groups in receiving health or drug education - No difference between groups in use of health or drug education curriculum materials - **LE schools more likely to report teaching personal development, health and drug education <p>Of those schools who received LE (N=42):</p> <ul style="list-style-type: none"> - 67%/76% of schools perceive the LE program to be part of the schools' personal development health/drug education program - 100% of schools perceive LE to complement personal development health/drug education program - 90% of schools' value the LEV-program (valuable/very valuable) - 84% of teachers conduct preparatory work and 98% conduct follow-up work (average 6.4 hours pre and post-visit work)
<p>Regina Hill Effective Consulting 2013-2014⁹⁻¹⁰</p> <p>Funded by Life Education Australia</p> <p>Cross sectional study</p>	<p>53 Australian Primary Schools (including 8 NSW primary schools):</p> <ul style="list-style-type: none"> - 13 participated in 'On the Case' - 16 participated in 'Think Twice' <p>5178 Kindergarten to Year 7 students:</p> <ul style="list-style-type: none"> - 468 participated in 'On the Case' - 390 participated in 'Think Twice' <p>269 school teachers and coordinators:</p>	<p>Intervention: participation in one of 10 primary school level LE modules including:</p> <ul style="list-style-type: none"> - 'On the case' - 'Think Twice' <p>Control: n/a</p>	<p>Student outcomes (assessed by module):</p> <ul style="list-style-type: none"> - Enjoyment - Learnt something new - Talked to friends/family about session <p>School teacher/ coordinator outcomes:</p> <ul style="list-style-type: none"> - Linked LE modules to class curriculum - Ran complementary activities before and after LE session - Used LE resources - School satisfaction 	<p>Student outcomes:</p> <p>'On the Case'</p> <ul style="list-style-type: none"> - 63% reported session was great (enjoyment) - 94% learnt something new - 71% talked to friend/family about session <p>'Think Twice'</p> <ul style="list-style-type: none"> - 50% reported session was great (enjoyment) - 92% learnt something new - 69% talked to friend/ family about session <p>School teacher/ coordinator outcomes:</p> <p>'On the Case'</p> <ul style="list-style-type: none"> - 63% linked LE session to their class curriculum - 38% ran complementary activities before the session - 94% ran complementary activities following the LE session - 94% used LE resources - 94% reported the LE session was well facilitated

	<ul style="list-style-type: none"> - 16 participated in 'On the Case' - 22 participated in 'Think Twice' 		<p>School outcomes:</p> <ul style="list-style-type: none"> - Frequency of LE bookings - Prevalence of annual bookings ≥ 4 years <p>All outcomes assessed 1-2 weeks following LE module delivery</p>	<p>'Think Twice'</p> <ul style="list-style-type: none"> - 79% linked LE session to their class curriculum - 36% ran complementary activities before the session - 100% ran complementary activities following the LE session - 93% used LE resources - 91% reported the LE session was well facilitated <p>School outcomes:</p> <ul style="list-style-type: none"> - 70% of schools booked annually - 58% booked annually for ≥ 4 years
<p>Regina Hill Effective Consulting 2015¹¹</p> <p>Funded by LEA</p> <p>Non-controlled pre-post study</p>	<p>136 QLD Primary Schools</p> <p>8658 Year 4-6 students:</p> <ul style="list-style-type: none"> - 2310 participated in 'On the Case' - 1570 participated in 'Think Twice' 	<p>Intervention: Participation in one of seven LE modules focused on healthy eating, physical activity, smoking, alcohol (mis)use, puberty and sexual health modules including:</p> <ul style="list-style-type: none"> - 'On the Case' - 'Think Twice' <p>Control: n/a</p>	<p>Student outcomes (assessed by module):</p> <ul style="list-style-type: none"> - Knowledge of smoking/ alcohol effect on body - Awareness of smoking/alcohol use in adolescents - Increased thinking about smoking/ alcohol effect on people they knew - Strategies if offered cigarette/ alcoholic drink - More/less likely to smoke/drink based on LE learnings - Intentions to smoke in future - Intentions to make safer decisions about alcohol in future <p>Outcomes assessed immediately before and after participation in LE module</p>	<p>Student outcomes:</p> <p>'On the Case'</p> <ul style="list-style-type: none"> - **Significant increase in knowledge about harms of smoking from <1% (pretest) to 27% (posttest) - **Significant increase in students correctly identifying proportion of 12-17 year old's never smoked from 14% (pretest) to 64% (posttest) - Intentions to not smoke in the future 79% (pretest) and 85% (posttest) - 68% learnt a lot about effects of smoking on body - 64% reported LE session had significant role in getting them to think about how smoking was affecting the people they knew - 64% reported LE session played a significant role in them knowing what to do if someone offered them a cigarette - 90% reported were less likely to smoke based on what they learnt <p>'Think Twice'</p> <ul style="list-style-type: none"> - Knowledge about harms of alcohol 8% (pretest) and 38% (posttest) - 57% learnt a lot about effects of alcohol on body - 61% LE session had significant role in increasing their awareness of alcohol risks - 50% reported LE session had significant role in getting them to think about how alcohol was affecting the people they knew - 64% reported LE session played a significant role in them knowing what to do if someone offered them a drink - 86% reported were likely make safer decisions about alcohol in future based on what they learnt

<p>Regina Hill Effective Consulting 2017¹²</p> <p>Funded by LE QLD</p> <p>Non-controlled pre-post study</p>	<p>5 QLD Primary Schools</p> <ul style="list-style-type: none"> - 3 schools participated in 'On the Case' <p>381 Year 4-6 (10-13 years) students:</p> <ul style="list-style-type: none"> - 224 participated in 'On the Case' <p>19 school teachers:</p> <ul style="list-style-type: none"> - 11 teachers participated in 'On the Case' 	<p>Intervention: Participation in 'All Systems Go' or 'On the Case'</p> <p>Control: n/a</p>	<p>Student outcomes:</p> <ul style="list-style-type: none"> - Previous LE attendance - Pre-existing knowledge - Pre-existing behaviour intention - Learnt something new/improved awareness understanding of healthy behaviour/avoidance of risk factors - Whether LE session: <ul style="list-style-type: none"> o Increased awareness o Encouraged reflection on topic/issue o Provide knowledge on ideas/issues o Helped develop skills/confidence - Awareness of smoking in adolescents (pre and post) - Post-session behavioural intention <p>Teacher outcomes:</p> <ul style="list-style-type: none"> - Relevance, quality and contribution of LE to their class - Effectiveness of LE program for their class - Previous experience with LE <p>School outcomes:</p>	<p>Student outcomes: 'On the Case'</p> <ul style="list-style-type: none"> - **Significant increase in knowledge about harms of smoking from 2% (pretest) to 23% (posttest) - **Significant increase in students correctly identifying proportion of 12-17 year old's never smoked from 9% (pretest) to 21% (posttest) - Non-significant increase from 72% (pretest) to 78% (posttest) students would never smoke - 66% participated in LE before - 95% reported learnt something new - 88% knew more about harms of smoking than before LE session - LE sessions helped learn a lot <ul style="list-style-type: none"> o 58% effect of smoking on body o 54% think about effects of smoking on them and others o 49% why people choose to smoke o 66% what to do if someone offered them a cigarette o 76% to make decision not to smoke - 88% information from LE made them less likely to smoke <p>Teacher outcomes (for 'On the Case' and 'All Systems Go' combined unless indicated):</p> <ul style="list-style-type: none"> - 4/5 of teachers reported need for health/safety education across their class was significant (relevance) - 95% reported LE session was delivered to a high standard/engaging for students - 74% reported LE made significant contribution to helping them address healthy/safety education in their class - 68% reported LE helped them integrate general health or tobacco into their classroom teaching - 90% undertook preparatory/follow up work related to LE - 79% found teacher/student resources useful - 53% had belief LE improved student health knowledge (effectiveness) - 63f
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			<ul style="list-style-type: none"> - Number of QLD schools implemented 'On the Case' in 2016 <p>Outcome data collected before and 6 weeks following LE visit to school</p>	
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*Reports not accessible – summary based from Hawthorne 1992; **significant difference reported; LE=Life Education; LEA=Life Education Australia; PDHPE=Personal Development, Health, and Physical Education; QLD=Queensland; NSW=New South Wales; 1. Gould K. Life Education Centre Evaluation Report. Sydney, NSW: New South Wales Drug and Alcohol Authority;1985; 2. Goodwin J, Nelson M. Life Education Centre: preliminary evaluation report. Unpublished paper. Sydney, NSW: Life Education Centre;1987; 3. Health Department Victoria. Summary report on LECV implementation in Victoria. Unpublished report. Melbourne: Health Department Victoria;1986; 4. Stephenson J, Quine S, Macaskill P, Pierce J. Drug Awareness and Use among Primary Schoolchildren: an Evaluation of the Life Education Centre Programs, Monograph Series N8. Canberra: National Campaign Against Drug Abuse;1988; 5. Quine S, Stephenson JA, Macaskill P, Pierce JP. A role for drug awareness and prevention programs external to the school? Health Education Research. 1992;7(2):259-267; 6. Hawthorne G, Garrard J, Dunt D. Primary school drug education: an evaluation of life education Victoria. 1992; 7. Hawthorne G, Garrard J, Dunt D. Does Life Education's drug education programme have a public health benefit? Addiction (Abingdon, England). 1995;90(2):205-215; 8. Hawthorne G. The social impact of Life Education: estimating drug use prevalence among Victorian primary school students and the state-wide effect of the Life Education programme. Addiction (Abingdon, England). 1996;91(8):1151-1160; 9. Regina Hill Effective Consulting. Life Education Program Evaluation. Melbourne, Victoria: Regina Hill Effective Consulting Pty Ltd;2014; 10. Regina Hill Effective Consulting. Life Education Program Evaluation: Executive Summary. Melbourne, Victoria: Regina Hill Effective Consulting Pty Ltd;2014; 11. Regina Hill Effective Consulting. Life Education Queensland Module Evaluation Term 3 and 4 2015. Melbourne, Victoria: Regina Hill Effective Consulting Pty Ltd;2016; 12. Regina Hill Effective Consulting. Life Education Queensland Communities for Children Evaluation. Melbourne, Victoria: Regina Hill Effective Consulting Pty Ltd;2017

Appendix 1.3. Tender documentation and contract



Request for Quote (RFQ)

Project Title:

Evaluation of the Life Education program (LE) New South Wales (NSW)

HAC: 16/31

Closing Time and Date: 10am, Tuesday 20 December 2016

Contact:

Genevieve Whitlam

Telephone: 02 9461 7264

Email: gwhit@doh.health.nsw.gov.au

Drug and Alcohol Population and Community Programs

NSW Ministry of Health

73 Miller St

NORTH SYDNEY NSW 2060

Introduction and Executive Summary

Life Education program

The aim of the LE program is to empower children and young people, through education, to live a safe and healthy life.

To meet this aim, LE provides a curriculum-based program to school students aged 3–15 years from a mobile classroom. The program is delivered by specially trained educators and includes interactive

storytelling approaches, digital and interactive tools, skills practice, animated videos and the use of character devices. The program also includes print-based and online teacher, student and parent resources.

The program objective is to contribute to the health and wellbeing of children and young people by helping them to develop the awareness, knowledge, confidence and skills that they need to make more informed, safer and healthier choices.

Refer to the following websites for more details about the program and previous evaluations conducted:

<http://www.lifeeducation.org.au/what-we-do/program-effectiveness>

https://www.lifeeducation.org.au/images/LatestNews/Life%20Education%20Evaluation%20Report_181114_vFINALPDF.pdf

https://www.lifeeducation.org.au/images/WhatWeDo/Life_ED_Qld_Evaluation_Report_2016_Final_Report.pdf

<http://www.lifeeducation.org.au/images/PDFs/Erebus%20Report%20Oct%202006.pdf>

LE Program Evaluation overview

The NSW Ministry of Health is seeking to engage an external organisation to undertake a robust evaluation of the LE program.

The evaluation will commence in October 2016 and be completed mid-April 2018. The Centre for Population Health, NSW Ministry of Health, will co-ordinate the evaluation, in collaboration with the Ministry's Centre for Epidemiology and Evidence.

The evaluation seeks to describe the LE program and how it is implemented state-wide, including program reach, and to assess the effectiveness of the program in changing knowledge and intentions.

The objectives of the LE program evaluation are to:

1. Describe the LE program model and how it is implemented within NSW schools
2. Assess the population reach and school uptake of the LE program
3. Investigate the short term impacts of the LE program in grade 5–6 students
4. Document the costs associated with delivery of the LE program in NSW

The evaluation may have multiple components including (but not limited to):

- Review of program documentation and administrative data
- Observations of the delivery of grade 5–6 LE modules
- Interviews with LNSW administrators and other key informants

- Surveys of school students in grades 5–6 (prospective data; baseline, immediate follow-up and 6-month follow-up; exposure and control group)
- Surveys and/or interviews with teachers.

The Respondent will be required to propose a robust framework and methodology to achieve the objectives of the evaluation. They will also need to demonstrate their:

- Experience in working effectively with multiple stakeholders
- Collecting data from primary school populations
- Experience in conducting robust evaluation of educational programs
- Experience in conducting cost analyses
- Capacity to manage several complex evaluation components concurrently
- Experience in authoring reports for Government agencies.

Publication of the findings in a peer-reviewed journal may be considered, but is not a requirement of this evaluation.

Meaningful engagement with LENSW, Life Education Australia (LEAus) and the NSW Department of Education will be critical to the success of the LE program evaluation. A multifaceted approach to collaboration with LENSW, LEAus and the NSW Department of Education will be undertaken during the design, development and implementation of the evaluation.

Submission Details

Submission

You must lodge the Response to the RFQ via the NSW eTendering Web site www.tenders.nsw.gov.au/health by **10:00am, 20 December 2016 (Sydney Time: EDT)**.

Electronic submissions must meet the following criteria:

- Must be in Microsoft Word 2003-97 format, with file name ending in “.doc” or “.docx”

Respondents should not wait until the nominated closing time to lodge their responses as difficulties in uploading responses to the website may be encountered where:

- many users attempt to upload responses at the same time, or
- the upload of large files sizes or volumes is attempted.

Due to probity considerations, responses submitted by email **will not** be permitted.

A response lodged wholly or partly after the Closing time will be registered as a Late Response and may be excluded from evaluation.

The NSW Ministry of Health may, at its discretion, allow the evaluation of a Late Response, if it judges that the lateness is due to circumstances outside the control of the Respondent.

Schedules

The Response is to contain the following completed Schedules, noting that any variation from them may result in exclusion from the Response evaluation:

Schedule
<p>1. Provide a draft evaluation framework, including:</p> <ul style="list-style-type: none"> a. proposed methodologies for all aspects of the evaluation – including detailed impact measures and analysis plan. b. proposed rigorous methodology to select the exposure and control groups c. proposed number of primary schools your organisation can reach within the budget and timeframe <p>(NB: The successful Respondent will need to finalise the framework in consultation with the Centre for Population Health and the LE Evaluation Advisory Committee.)</p>
<p>2. Provide a draft implementation plan and project timeline that outlines how you will deliver the Statement of Requirements outlined in this RFQ.</p> <p>(NB: The successful Respondent will need to finalise the implementation plan in consultation with the Centre for Population Health and the LE Evaluation Advisory Committee)</p> <p>The Respondent’s implementation plan needs to address and include realistic timeframes for <u>all</u> aspects of the Statement of Requirements and demonstrate capacity to manage multiple components of the evaluation concurrently. The implementation plan should also identify any project risks and identify mitigation strategies for these.</p>
<p>3. Provide information on the staff who will work on the project, including their role in the project and estimated time allocation. Also, for each of the project staff, provide a brief CV (max 1 page).</p>
<p>4. Provide information to demonstrate your organisation’s experience conducting robust evaluation of educational programs in school settings.</p>
<p>5. Provide:</p> <ul style="list-style-type: none"> • At least two (2) examples of reports completed for similar projects, including one prepared for a Government Agency, that illustrate your organisation’s experience in conducting research studies in primary schools, quantitative and qualitative data analysis, working effectively with multiple stakeholders and conducting cost analyses • Three (3) referees from recent similar projects.
<p>6 Provide a detailed budget breakdown.</p>
<p>7 Respondent Particulars</p>
<p>8 Statement of Compliance</p>

Submission Questions and Clarifications

You may contact the following person if you have any questions or require clarification on any topics covered in this Request:

Genevieve Whitlam

Senior Program Manager, Drug and Alcohol Population and Community Programs

NSW Ministry of Health

Locked Mail Bag 961

NORTH SYDNEY 2059

Telephone: **02 9461 7264**

Email: gwhit@doh.health.nsw.gov.au

Please note that questions and answers of broad impact or significance will be communicated to all Respondents by issue of addenda through the NSW eTendering Web site www.tenders.nsw.gov.au/health.

Business Overview & Background

The delivery of drug and alcohol school based education is a priority for the NSW Ministry of Health. LENSW is a community-based, independent preventative drug and health education program delivered to children and young people aged 3–15 years, and their families, across Australia. The program has been running in NSW for about 30 years.

LENSW is currently funded by the NSW Ministry of Health, other Government agencies and by donations to deliver preventative drug and health education to NSW school children. In 2015-16, the NSW Ministry of Health also provided an additional one-off grant to improve monitoring systems and support more mobile classrooms and educators to deliver LE programs to an additional 700 low socio-economic status areas over the next 3 years.

The NSW Ministry of Health has commissioned the Sax Institute to undertake a review to identify best-practice approaches for education programs that aim to reduce risk-taking behaviour and promote healthy decision-making in school children. The findings from this review will inform the LE program evaluation.

As such, the primary purpose of the LE program evaluation is to identify whether the program is achieving its intended outcomes as it is currently implemented, and to identify areas for program improvement.

SCOPE

The scope of this evaluation is limited to:

1. Implementation review of the LENSW program in all NSW primary schools, including:

- Description of governance structures and processes
- Description of program development
- Reach and uptake across the intended target groups
- Methods of program delivery, including how these methods have changed over time
- Standards of program delivery including indicators of quality
- Comparison of the delivery methods of the LE program with best-practice approaches and principles for relevant education programs (as identified through the commissioned review mentioned above) and with the curriculum at different Stages
- Type and standard of regular data collection and monitoring practices
- Program costs

2. Assessment of short term impacts among students in Grades 5–6 in NSW Government schools, including:

- Exposure group – students who attended the LE program
- Control group – to be proposed by the Respondent
- Investigation and description of other tobacco, drug and alcohol education received by the exposure group and the control group
- Obtaining appropriate consent and required approvals up-front
- Immediate and short-term impacts (to be measured immediately post-program and at 6-month follow-up):
 - Awareness and knowledge of tobacco, alcohol and drug issues
 - Attitudes regarding tobacco, alcohol and drugs
 - Awareness of options to avoid risk behaviours, and confidence and skills to use those options
 - Intentions regarding future tobacco-, alcohol- and drug-related behaviours

3. Cost analysis, including:

- overall expenditure from the LE perspective for the primary school program in NSW
- average cost per primary school child reached
- variations in cost by location of program delivery (e.g. metropolitan Sydney versus rural and regional areas)

CONTEXT

There are a number of contextual and program factors that will impact on the design and interpretation of the evaluation:

1. Program content

The LE health and drug education program is designed to be integrated into the Australian Curriculum Health and Physical Education F-7 and the NSW Personal Development, Health and Physical Education K-6 syllabus taught in NSW schools. Each module is linked to the Curriculum and Syllabus (**ATTACHMENT A**). In addition, education sessions are tailored for each class and therefore the focus of each module may vary from class to class.

2. Varying school participation options

The program is designed to be offered sequentially, with a new program option each year as children progress from Kindergarten to Year 7. However, it is not compulsory for schools to take a sequential format. School participation may be annual (sequential), biennial (every second year), irregular/ occasional or on a Stage¹ basis (e.g. a school may book the service annually but only for Stage 1 or any combination of the stages).

3. Available program data

LENSW currently holds historical data between 2009 and 2016 and prospective data indicating future bookings between 2016 to 2017. The available data fields are:

- Organisation (school, suburb)
- Year
- Status (indicates the current stage of the booking cycle)
- Dates (e.g. entered as “Mon 7/9/2012 to Wed 12/9/2012”)
- Life Education Region
- Life Education sub-region
- Classes (number)
- Sessions (number)
- Students (number)
- Students (proportion)
- Programs (program names listed as text including grade and number of students attended, with multiple programs listed in one row)

¹ The Board of Studies Teaching & Educational Standards NSW defines “Stages”
<https://syllabus.bostes.nsw.edu.au/stages/>

- State electorate
- Federal electorate
- Local government
- ID (the identifier for the single record to which every booking or point of contact for a particular school is attached)
- LGA
- Received (date the booking was received) – prior to 2015-16, this field is not populated)
- Street postcode
- Street suburb
- Postal suburb
- Postal postcode
- School name

Since 2016, an additional field known as “Stage”¹ has been collected.

4. Interventions context

Students across NSW will be exposed to many and varied interventions aimed at promoting healthy lifestyle and reducing risk-taking behaviour before, during and after attending the Life Education program. Examples include the general school curriculum, other NSW Health programs such as the Healthy Children Initiative and other Government and non-Government campaigns and programs.

5. Length of time between the intervention and outcomes

The primary target population for the Life Education program is 5-12 year olds. In 2010, the National average age of first trying an alcoholic drink or smoking a cigarette was almost 16 years (NDSHS 2013). This means there are several years between receiving the intervention and the potential risk-taking years. The program attempts to account for this challenge by aiming to build pre-disposing factors. However, it is assumed that these factors will lead to positive long term outcomes.

Statement of Requirements

The following tasks are required of the external evaluation organisation:

1. Develop a complete evaluation framework and implementation plan:

The external evaluation organisation will submit a draft evaluation framework including proposed methodology and analysis plans, and an implementation plan as part of their application to undertake this project. The organisation will then be required to develop a final complete evaluation framework – including data collection instruments and guides and data analysis plans – and a final implementation plan, in close collaboration with the Centre for Population Health, and the LE Evaluation Advisory Committee. The implementation plan will require approval from the LE Evaluation Advisory Committee and the Centre for Population Health prior to commencement.

2. Obtain relevant approvals:

The external evaluation organisation will be required to obtain approvals from relevant bodies, including a lead NSW Health Human Research Ethics Committee and the State Education Research Applications Process (SERAP). This will involve preparing and revising application(s) and related documentation and responding to inquiries and requests from the relevant committees. In seeking approvals, the external evaluation organisation will liaise with the LE Evaluation Advisory Committee as required. Feasible timelines for obtaining these approvals should be considered in project planning.

3. Ensure ongoing communication with key stakeholders throughout the project:

The external organisation will be required to work closely with the Centre for Population Health and the Life Education Evaluation project management team and to liaise effectively with the LE Evaluation Advisory Committee. Further information about the roles of each of these groups is provided in the ‘Contract Management – Governance Arrangements’ section of this document (pp.14-15). The Respondent’s implementation plan and project timeline should outline processes for working with each of these groups.

4. Undertake all evaluation components:

The external evaluation organisation will be required to undertake all evaluation components specified in the final evaluation framework and implementation plan. There may be multiple components to this evaluation. It is proposed that the components could include (but not be limited to):

- Component 1: Review of program documentation and administrative data
 - Source and analyse relevant data including conducting cost analysis
- Component 2: Observations of the delivery of grade 5–6 LE modules

- Attend example/s of LE modules delivered to grade 5–6 students
- Collect and summarise information on observations of content and method of delivery
- Component 3: Interviews with LENSW administrators, teachers², and other key stakeholders
 - Design data collection instruments
 - Conduct interviews
 - Transcribe and analyse data
- Component 4: Self-administered surveys with school students in grades 5–6 (prospective data; baseline, immediate post-program and 6-month follow-up) and teachers²
 - Design and implement surveys³
 - Develop analysis plans
 - Clean and analyse data

Relevant approvals will be required prior to conducting the evaluation.

5. Data management and analysis:

The external evaluation organisation will collect, manage and analyse data as per the final evaluation framework, ethics and other approvals, and the implementation plan. The external evaluation organisation will have contractual obligations to ensure the confidentiality, privacy, and security of all data is maintained. All data will be returned to the Ministry of Health after the successful completion of this project.

Submit specified project reports:

The external evaluation organisation will be required to prepare and submit:

1. Progress reports with the first report to be provided by the end of March 2017. These reports are to include any preliminary results noted to-date.
2. A final evaluation report describing findings of all evaluation components. This report will be provided by 13 April 2018 and may be made publicly available. The final report will

² A decision will need to be made as to whether interviews or surveys will be used with teachers

³ It is a requirement that standard survey modules be used when collecting data about health behaviours and intentions (e.g. School Students Health Behaviours Survey).

synthesise the findings from the various evaluation components to outline how the evaluation has achieved the evaluation objectives and answered the evaluation questions. The report will adopt the following structure: Executive Summary, Background, Methods, Results and Discussion.

7. Declare Conflict of Interests:

The external evaluation organisation will be required to declare any Conflict of Interest at any stage during the project.

8. Meet the project milestones as outlined below:

- February 2017: External evaluation organisation submits ethics and other applications.
- March 2017: External evaluation organisation submits the first progress report
- April 2017: External evaluation organisation commences implementation of evaluation components 1, 2, 3 and 4.
- July 2017: External evaluation organisation submits the second progress report
- November 2017: External evaluation organisation submits the third progress report
- January 2018: External evaluation organisation submits the fourth progress report
- March 2018: External evaluation organisation submits draft final evaluation report describing and synthesising findings of all evaluation components.
- mid-April 2018: External evaluation organisation submits final evaluation report, incorporating comments from the Advisory Committee
- late-April 2018: External organisation returns all copies of the data to the NSW Ministry of Health

9. Complete the Respondent Particulars and Statement of Compliance Forms

- Schedule 1 - Respondent Particulars (attached)
- Schedule 2 - Statement of Compliance (attached)

Evaluation Criteria

The Evaluation Panel will assess submissions against the following criteria, which link directly to the requested RFQ Schedules and Statement of Requirements:

Criteria
1. Proposed evaluation framework is high quality, appropriate, feasible and addresses the objectives of the LE program evaluation
2. Proposed methodology and analysis plan is detailed, feasible and addresses the objectives of the LE program evaluation
3. Proposed implementation plan is feasible and the respondent demonstrates capacity to manage multiple components of the evaluation concurrently
4. Potential project risks and appropriate mitigation strategies are identified
5. Profile of team members' qualifications, roles and experience as specifically documented in the proposal are relevant to the project, include the range of skills required to perform the evaluation and demonstrates experience in conducting robust evaluations of educational programs within the school setting
6. Proposed fee structure is feasible and represents value for money.

Note: The lowest quote will not necessarily be accepted.

Following the selection of the preferred Supplier, the Centre for Population Health may or may not consider any Alternate Offers provided by that Respondent in its response to this Request.

Ethics

Approval for this project will need to be sought from:

- A lead NSW Health Human Research Ethics Committee
- State Education Research Applications Process (SERAP)

Respondents are to comply with the following:

- NSW Health Code of Conduct
http://www.health.nsw.gov.au/policies/pd/2012/pdf/PD2012_018.pdf
- NSW Government's Procurement Policy Framework
<http://www.procurepoint.nsw.gov.au/policy-and-reform/nsw-procurement-board/nsw-government-procurement-policy-framework>

Terms and Conditions

Respondents are to comply with the terms and conditions of the attached sample contract **(Attachment B)**.

Respondents are to note that, in accordance with the Government Information (Public Access) Act 2009, certain details of the prospective contract are to be displayed on the NSW Government tenders website, www.tenders.nsw.gov.au.

Contract Management

Governance Arrangements

LE Evaluation Advisory Committee

The LE Evaluation Advisory Committee has been established to oversee and advise on: the development and implementation of the evaluation; the procurement and management of the external evaluation organisation; and the interpretation and reporting of the evaluation findings. The Committee includes representatives from: NSW Ministry of Health and the NSW Department of Education.

The external evaluation organisation will be expected to liaise with the LE Evaluation Advisory Committee throughout the project, particularly in relation to:

- Developing the final evaluation framework and implementation plan;
- Obtaining appropriate approvals for the evaluation;
- Engaging key stakeholders, including schools;
- Use, interpretation and management of data;
- Managing emerging issues and risks;
- Progress against project milestones; and
- Reporting of evaluation findings.

LE Evaluation Project Management Team

A project management team from the Centre for Population Health and the Centre for Epidemiology and Evidence will oversee the day to day running of the project and will be actively involved and in regular contact with the external evaluation organisation. It is expected that the Centre for Population Health project management staff and representatives of the external evaluation organisation will meet regularly.

Contract Review Meetings

Contract review meetings will be held when the Evaluation Implementation Plan is submitted and following achievements of milestones and may be face to face or via teleconference.

Contact Officer

The contact officer for the LE Evaluation is:

Genevieve Whitlam

Senior Program Manager, Drug and Alcohol Population and Community Programs

Centre for Population Health

NSW Ministry of Health

Locked Mail Bag 961

NORTH SYDNEY 2059

Telephone: 02 9461 7264 Email: gwhit@doh.health.nsw.gov.au

Price and Payment

An indicative price for this project is \$200,000 (excluding GST).

A detailed budget for the project is to be submitted, noting that prices are to be fixed, and be exclusive of GST, with the GST element shown separately.

It is anticipated that the following payment schedule will be followed, according to the deliverables stated below:

Selected Milestones:	Deliverables	% Budget
Commencement of Project	• Execution of Agreement	25% of total budget
	• Obtain approvals	15% of total budget
Delivery of progress reports	Progress reports submitted, as follows: <ul style="list-style-type: none">• 31 March 2017• 31 July 2017• 30 November 2017• 31 January 2018	5% of total budget per report (total of 20%)
Final report	• Final evaluation report submitted describing and synthesising findings of all evaluation components by 13 April 2018	40% of total budget

RFQ Timeline

RFQ Phase	Date
RFQ issued	16 November 2016
RFQ closes	20 December 2016
Assessment of proposals and contracting:	Late December 2016
Commencement of project:	Early January 2017

Validity Period

The Respondent's submission is to be valid for three (3) months from the lodgment/closing date.

Respondents are to note that its submission to this Request is made at its own cost, and that NSW Health, whilst making the Request in good faith, is not obliged to proceed with this project.

AGREEMENT BETWEEN

THE HEALTH ADMINISTRATION CORPORATION, a Corporation Sole constituted by section 9 of the Health Administration Act 1982, ABN 45 100 538 161, and having its office at Level 11, 73 Miller Street, North Sydney (**HAC**)

AND

THE UNIVERSITY OF NEWCASTLE, AUSTRALIA ABN 15 736 576 735, and having its address at University Drive, Callaghan, NSW, 2308, Australia (**the Supplier**)

IT IS AGREED AS FOLLOWS:

1. DEFINITIONS

"Agreement" means this document including all Schedules and Annexures;

"Contract Material" means all material brought into existence pursuant to this Agreement, or for the purpose of performing the Services under this Agreement, including but not limited to documents, equipment, information and data stored by any means including intellectual property rights therein;

"Fee" means the fee as referred to in Clause 5 and Annexure 2 of this Agreement;

"GST" has the same meaning as in the GST legislation;

"GST legislation" means any law imposing or relating to GST and includes the *A New Tax System (Goods and Services Tax) Act 1999* (Cth);

"HAC" includes a delegate of the Health Administration Corporation;

"HAC's Materials" means any documentation, information, data or material including electronic information or data given by HAC to the Supplier by whatever means;

"Intellectual Property" includes all industrial and intellectual property rights including but not limited to copyright, future copyright, patents, trade/business or company names, registered and unregistered trademarks, registered designs, trade secrets, know how, rights in relation to circuit layouts and all other rights of intellectual property as recognised by the law in force in New South Wales;

Ministry means the NSW Ministry of Health and includes its agents and employees;.

"Proposal" means the response submitted to HAC by the Supplier to perform the work required by the Tender Specifications or Consultancy Brief and which forms part of this Agreement at Annexure 3;

"Services" means the services described in Annexure I and includes the Proposal;

"Specified Personnel" means the key personnel of the Supplier who are required to undertake the provision of Services or part of the services constituting the Services as named in the Schedule.

"Supplier" means the persons or bodies party to this Agreement engaged to perform the Services and includes officers, employees, agents and authorised sub-contractors (and their employees and agents) utilised by the Supplier;

"Tax" means any sales tax, value added tax, duty, withholding tax, levy, impost or other charge or duty levied by any government in Australia or elsewhere, which arises out of or in connection with the Supplier's performance of its obligations under this Agreement, but excludes GST.

"Tender Specifications" or **"Consultancy Brief"** means any Tender Specifications or Consultancy Brief or any other document issued by HAC to the Supplier for the purpose of obtaining the proposal and which describes the services to be performed by the Supplier.

2. ENGAGEMENT

HAC engages the Supplier to provide the Services in accordance with this Agreement.

3. SUPPLIER'S OBLIGATIONS

3.1 Due Diligence

The Supplier must perform the Services in a diligent manner and with all necessary skill and care expected in accordance with the provision of such Services and in accordance with all representations and warranties as to the Supplier's experience and ability expressly or impliedly made by reference to its Proposal and this Agreement, or by law.

3.2 Timely Provision of Services

The Supplier must perform the Services expeditiously and in accordance with the time limits if any specified in the Schedule.

3.3 HAC's Materials

- (a) The Supplier accepts all responsibility for the secure guardianship of HAC's Materials provided by HAC to the Supplier.
- (b) Upon completion of this Agreement or in the event of termination, the Supplier must as soon as practicable return to HAC, HAC's Materials and the Contract Material.
- (c) Clause 3.3(b) does not operate to prevent the Supplier from keeping a bona

vide copy of the Contract Materials for its records subject always to Clause 3.4.

3.4 Confidentiality

The Supplier must not without the prior written consent of HAC disclose any information in connection with the Services or this Agreement to any person not a party to this Agreement other than:

- (a) as necessary for the purposes of performing its obligations under this Agreement, or
- (b) with respect to any matter already within public knowledge,

and it is agreed that this obligation survives completion or termination.

3.5 Sub-contracting

- (a) The Supplier must not assign or sub-contract any part of the Services without the prior written consent of HAC
- (b) Consent given by HAC in accordance with this clause does not relieve the Supplier from its obligations under this Agreement.

3.6 Statutory Requirements

- (a) Without limiting the generality of any other provision of this Agreement the Supplier must ensure that all work done in connection with the Services complies with all applicable legislation, regulations, codes of conduct and all relevant Australian standards applicable to the Services.
- (b) The Supplier shall at all times be responsible for the employment, supervision and standard of work of any person carrying out work for the Supplier under this Agreement.

3.7 Conflict of Interest

- (a) The Supplier warrants that it has no conflict of interest in the performance of the Services as at the date of this Agreement.
- (b) Immediately upon becoming aware of the existence, or possibility of a conflict of interest affecting the Supplier, the Supplier must advise HAC in writing, in which event HAC reserves its rights under Clause 13.

3.8 Access to Supplier

The Supplier must upon reasonable notice from HAC provide access to the Supplier or Specified Personnel in order for HAC to inspect, discuss or assess the provision of the Services.

3.9 Specified Personnel

If Specified Personnel are unable or not suitable in the reasonable opinion of HAC to undertake or perform the services assigned to them, the Supplier must provide replacement personnel acceptable on reasonable grounds to HAC at no additional charge as soon as practicable.

4. HAC'S OBLIGATIONS

HAC will as soon as practicable, or as required by this Agreement, make available to the Supplier all relevant instructions, information, documentation or data or any other material as required for the performance of the Services.

5. FEES

- 5.1 HAC will pay the Fee to the Supplier in accordance with Annexure 2, subject to the conditions of this Agreement including clause 6.

5.2 If the Supplier has obtained HAC's prior written approval to incur or pay any costs, expenses, fees or charges, HAC will reimburse the Service Provider for those costs, expenses, fees or charges.

6. TAXES

6.1 Subject to clauses 6.2 and 6.3, the Supplier is liable to pay all Taxes imposed or levied in connection with services supplied under this Agreement.

6.2 To the extent that the Supplier is liable to pay GST in connection with services supplied under this Agreement, and unless specified in Annexure 2, the fees and any reference to costs or expense specified in this Agreement are inclusive of GST.

6.3 If there is any abolition or reduction, increase or introduction of any Tax, the Price that is payable for the Deliverable, or any other cost or expense that is payable under the Customer Contract will be varied so that the Supplier's net dollar margin for the Deliverable, cost or expense remains the same.

6.4 The Supplier warrants and undertakes that at the time any supply on which GST is imposed is made by it to HAC under this Agreement it is or will be registered under the GST legislation. If HAC requests written evidence of registration, the Supplier will promptly produce evidence satisfactory to HAC.

7. VARIATIONS

HAC may request (in writing) the Supplier to vary the Services provided the variation is within the general scope of the Services described in Annexure 1. The variation, including fees for the variation, must be agreed in writing between the parties prior to the variation being implemented.

8. INTELLECTUAL PROPERTY

8.1 Ownership

- (a) Subject to Clause 8.1(b), ownership of Intellectual Property in or in relation to Contract Material vests upon its creation in HAC. The Supplier must, upon request by HAC, do all things necessary to vest ownership and title of Intellectual Property in HAC.
- (b) If ownership of or title in Intellectual Property in relation to Contract Material is not capable of being vested in HAC under Clause 8.1(a) because the Supplier itself does not own that Intellectual Property, the Supplier must at its cost ensure that HAC is suitably and irrevocably licensed to use that Contract Material or that Intellectual Property.
- (c) The Supplier must ensure all licence fees and/or consents required under law are paid and/or obtained in connection with any reproduction, adaptation or use of any Intellectual Property or Contract Material necessary for the provision of the Services.
- (d) The Supplier agrees to indemnify HAC and the Ministry for any demand, cost and expense made, sustained, brought or prosecuted as a result of any breaches by the Supplier of the intellectual property rights of third parties whilst performing the Services under this Agreement.

8.2 Publications

- (a) If the Supplier intends to publish or distribute any presentation, abstract, journal article, media material, conference paper or similar containing any references to the Services or the Contract Material (Publication) then the Supplier must submit an unabridged version of the Publication to the Ministry no less than 30 business days prior to the proposed due date for submission for review and or publication. The NSW Health logo must not be used without HAC's approval in writing beforehand.
- (b) Within 30 business days after receipt of a copy of the Draft Publication,

the Ministry must:

i. approve the Publication; or

ii. on a reasonable basis, reject the Publication in writing. In which case the Supplier must omit the content identified by HAC as unacceptable from the Publication, provided that this rejection may not be exercised by the Ministry after a period of 12 months has elapsed following provision of the final reports, issues papers and other deliverables under this agreement.

- (c) Approval is deemed to be given upon expiration of 30 business days after the date the Ministry received the Draft Publication if there is no written response from the Ministry to the Supplier pertaining to the approval of the Relevant Content.'
- (d) The Supplier agrees to acknowledge the support of the Ministry in any publications.

8.3 Delivery of Contract Material

- (a) Subject to the terms of the Tender Specifications or Consultancy Brief on, or as soon as practicable after, the expiration or earlier termination of this Agreement, the Supplier must deliver to HAC all Contract Material and all HAC's Material.
- (b) Subject to Clause 3.4, Clause 8.3(a) does not operate to prevent the Supplier from keeping a bona fide copy of the Contract Material for its own records.

9. INDEMNITY

9.1 Subject to Clause 9.2, the Supplier agrees to indemnify HAC against any claim or

demand, made or prosecuted in any manner, arising from any injury to any person (including death) or any damage to any property, where such injury or damage was caused by any wilful or negligent act or omission of the Supplier, its employees or agents, in connection with this Agreement.

9.2 The Supplier's liability to indemnify HAC under Clause 9.1 shall be reduced proportionately to the extent that any unlawful or negligent act or omission on the part of HAC directly contributed to the injury or damage.

10. INSURANCE

10.1 Insurance

The Supplier must take out and maintain with a reputable insurance company the insurance policies for the term of this Agreement as specified in the Schedule.

Coverage shall be extended to sub-contractors.

A certificate of currency(s) for the policy(s) shall be made available to HAC for inspection on demand.

10.2 Worker's Compensation

The Supplier is responsible for obtaining workers' compensation insurance as is required by law.

10.3 Superannuation Guarantee

(a) Companies

The fees quoted by the Supplier are inclusive of liability under the Superannuation Guarantee (Administration) Act 1992.

(b) Individuals

The prices quoted by individuals, not registered as companies, include the Ministry's superannuation liability under the provisions of the Superannuation Guarantee (Administration) Act 1992. The Supplier will be responsible for the production of any documentation required to be completed in this regard.

11. KEEPING OF RECORDS

11.1 Records

The Supplier must keep proper accounts, records (including information stored by computer and other devices) and time sheets in accordance with accounting principles generally applied in relevant commercial practice in respect of its charges, and/or billing, and any reimbursements payable pursuant to this Agreement.

11.2 Access

The Supplier must, within a reasonable time of any request, give HAC access to, or copies of, any information which may be reasonably required to enable any claim to be substantiated and verified.

12. NEGATION OF EMPLOYMENT AND AGENCY

12.1 The Supplier shall not represent itself, and shall ensure that its employees and agents do not represent themselves, as being employees or agents of HAC or the Ministry.

12.2 The Supplier shall not by virtue of this Agreement be, or for any purpose be deemed to be, an employee or agent of HAC or the Ministry.

13. TERMINATION

13.1 Termination by either party

Subject to sub-clauses 13.2 and 13.3 either party may terminate this Agreement if the other party breaches any term of this Agreement and such breach is not remedied within 28 days of receipt of written notice of the breach.

13.2 Termination by HAC

If the Supplier:

- (a) becomes bankrupt, or insolvent, or enters into a scheme or arrangement with its creditors,
- (b) fails to carry out the Services according to the terms of this Agreement, or
- (c) without reasonable cause suspends the carrying out of the Services

HAC may terminate this Agreement immediately by written notice addressed to the Supplier. Upon receipt of such notice the Supplier shall cease or reduce work under this Agreement in accordance with the tenure of the notice and shall forthwith do everything possible to mitigate any consequential loss to either party. HAC will only be liable to pay that part of the fee that relates to services provided up to the date of termination.

13.3 Termination by the Supplier

If HAC fails to pay the Supplier in accordance with this Agreement the Supplier may forthwith terminate this Agreement by written notice addressed to HAC.

13.4 Termination for Convenience

HAC may by notice in writing at any time terminate this Agreement for convenience, such termination to be effective immediately unless stated otherwise in the notice. The Supplier must immediately comply with any directions given in the notice and must do everything that is reasonably practical to mitigate its losses arising in consequence of termination of this Agreement under this clause.

If HAC exercises its right under this clause, it will pay the Supplier for any reasonable unpaid amounts relating to services properly performed up to the date of termination and reimburse the Supplier for its unavoidable costs and expenses directly incurred as a result of termination, provided that they do not exceed the total amount of Fees set out in Annexure 2 and is supported by satisfactory written evidence. Once HAC has paid such amounts, no further compensation is payable for termination under this clause.

13.5 Supplier's Continuing Liability

Termination by HAC will not release the Supplier from liability in respect of any breach of, or non-performance of, any obligation by the Supplier pursuant to this Agreement.

14. TERMINATION WITHOUT PREJUDICE

The expiration or termination of this Agreement is without prejudice to any accrued rights or remedies of each party.

15. CONTINUING OBLIGATIONS

The expiration or determination of this Agreement shall not affect such of its provisions as are expressed to operate or have effect thereafter.

16. DISCONTINUANCE OF HAC

Subject to any contrary legislative intention:

- (a) if HAC is reconstituted, renamed or replaced or if its powers or functions are transferred to another entity, this Agreement is deemed to refer to that new entity; and
- (b) if HAC ceases to exist, this Agreement is deemed to refer to that entity which serves substantially the same purpose or object as the former entity.

17. INCONSISTENCIES

If there are any inconsistencies between the Services to be provided and/or the terms and conditions for the provision of Services as detailed in this Agreement, the Tender Specification or Consultancy Brief, and the Proposal, to the extent of any inconsistency, the Tender Specification or Consultancy Brief and this Agreement will have precedence over the Proposal.

18. NOTICES

The addresses of the parties for the purposes of giving any notice shall be as set out in the Schedule or as may from time to time be specified in writing between the parties.

19. DISPUTES

19.1 Disputes shall as far as possible, be satisfied by agreement between the parties.

19.2 If the dispute is not resolved, then the dispute is to be referred to the Australian Commercial Disputes Centre for mediation or any other agreed venue which conducts mediation.

20. APPLICABLE LAW

This Agreement will be governed by, and construed in accordance with, the law for the time being in force in New South Wales, and the parties submit to the jurisdiction of the courts of that State.

21. COMMENCEMENT DATE AND DURATION

This Agreement will commence on the commencement date stated in the Schedule or, if no commencement date is stated, the date signed by both HAC and the Supplier. The Agreement will continue in effect until the date stated in the Schedule or, if no date is specified, upon completion of the Services.

Executed as an Agreement on _____

EXECUTED for and on behalf of the

HEALTH ADMINISTRATION CORPORATION

But not so as to incur personal liability By:

..... (Signature) (Name and Position)

Date: _____

..... (Signature of Witness) (Print Name of Witness)

Date: _____

EXECUTED by and on behalf of:

UNIVERSITY OF NEWCASTLE

..... (Full name of Individual, company or organisation)

..... (Signature of Individual or(Name of Individual or authorised authorised representative for representative) company or organisation)

Date: _____

..... (Signature of Director/Secretary/ (Print Name of Witness) Witness)

Date: _____

SCHEDULE

Item 1 Time to complete Services (clause 3.2): 2 years

Item 2 Specified Personnel:

- John Wiggers
- Rebecca Hodder
- Luke Wolfenden
- Nicole Nathan
- Karen Gilham
- Jennifer Bowman
- Research Manager (to be employed)
- Research Assistant (to be employed)

Item 3 Commencement Date and Duration (clause 21): Upon signature of this contract in May 2017 (2 years)

Item 4 Insurance

- (a) Public Liability insurance with an indemnity of at least \$ 10 million in respect of each and every occurrence and unlimited in the aggregate for any one period of cover for the period of this Agreement;
- (b) Professional Indemnity Insurance with indemnity cover of at least \$10 for a period ; and
- (c) Adequate workers compensation insurance in accordance with applicable legislation for all Suppliers' employees.

Item 4 Notices to:

HAC contact: Genevieve Whitlam, Senior Program Manager, Drug and Alcohol Population and Community Programs, Centre for Population Health

Address: Drug and Alcohol Population and Community Programs
Level 1, NSW Ministry of Health – 73 Miller St, North Sydney, NSW 2059

Email: gwhit@moh.health.nsw.gov.au

Ph: 02 9461 7264

Supplier contact: Rebecca Hodder, Research Fellow, University of Newcastle
Address: Hunter New England Population Health

Locked Bag 10, Wallsend NSW 2287

Email: rebecca.hoder@hnehealth.nsw.gov.au

Ph: 02 4924 6297

ANNEXURE 1 THE SERVICES

1. Project Description

Title: Evaluation of the Life Education program New South Wales (LE NSW).

The evaluation seeks to describe the LE NSW program and how it is implemented state-wide, including program reach, and to assess the effectiveness of the program in changing knowledge and intentions.

The objectives of the LE NSW program evaluation are to:

1. Describe the LE program model and how it is implemented within NSW schools
2. Assess the population reach and school uptake of the LE program
3. Investigate the short term impacts of the LE program in grade 5 students
4. Document the costs associated with delivery of the LE program in NSW

To achieve these objectives the evaluation comprises four components:

Component 1. Review of program documentation and administrative data

Data will be collected regarding:

- governance structures and processes (including identification of LENSW administrators and other key stakeholders);
- program development;
- reach and uptake of the LE program across the intended target groups in NSW;
- methods of program delivery;
- standards for the delivery including relevant quality indicators of LE across NSW primary schools;
- type and standard of regular data collection and monitoring practices;
- the costs of routinely implementing the program (including staff time to deliver the program, program resource material production, monitoring and quality

assurance processes, travel costs to visit school to deliver the program etc).

Component 2. Observations of the delivery of grade 5-6 LE modules

This component comprises:

- Observing the 4-6 modules delivered in grades 5-6 (2 observations per module, totalling up to 12 observations).

Component 3. Telephone interviews with LENSW administrators and key stakeholders

This component comprises semi-structured Computer Assisted Telephone Interviews of 30 stakeholder interviews including but not limited to representatives from:

- Life Education NSW
- Life Education Australia
- Life Education educators
- School Principals
- School teachers
- NSW Department of Education and Communities (DEC)
- NSW Ministry of Health

Component 4. Self-administered surveys with school students in grade 5 to assess short term impacts of LENSW

This component will include a pilot of the student survey instrument (including pre- and immediate post) to test understanding, acceptability and ability to detect change.

The survey is to include items measuring the following primary outcomes:

- Awareness and knowledge of tobacco, alcohol and drug issues
- Attitudes regarding tobacco, alcohol and drugs

- Awareness of options to avoid risk behaviours
- Confidence and skills in using options to avoid risk behaviours
- Intentions regarding future tobacco, alcohol and drug-related behaviours

It is also to include items measuring the following secondary outcomes:

- student participation in other tobacco, alcohol or drug education programs
- other factors associated with substance use (e.g. experience of pain)
- known risk (e.g. access and peer use) and protective factors (e.g. caring relationships with adults and peers) for tobacco, alcohol and illicit drug use initiation.

The survey may include additional questions about risk and protective factors.

The final method for this component is dependent on the availability and quality of Life Education NSW data and will be determined in consultation with the Ministry of Health.

This project includes active management of the Human Research Ethics Committee (HREC) process and State Education Research Applications Process (SERAP) to minimise delays. This includes:

- Provision of a brief outline of the proposed research to SERAP
- Meeting with representatives from the relevant DEC divisions and the Manager, SERAP, regarding the proposed research, and outlining the research methods including the study design, sampling methodology, planned surveys and issues related to duty of care and confidentiality. The purpose of the meeting will be to obtain advice and endorsement from the representatives regarding the proposed evaluation methods
- Preparation of concurrent submissions to the University of Newcastle HREC and SERAP
- Request an expedited review from SERAP
- If required, obtain advice regarding any requested changes to the research proposal for SERAP approval to be granted. This will involve consultation with the relevant DEC division representatives and Manager, SERAP.

Governance

HAC will form a Steering Committee which will meet approximately every 3–4 months. UON will be required to attend Steering Committee meetings.

2. Objectives of Project

The objectives of the LE NSW program evaluation are to:

1. Describe the LE program model and how it is implemented within NSW schools
2. Assess the population reach and school uptake of the LE program
3. Investigate the short term impacts of the LE program in grade 5 students
4. Document the costs associated with delivery of the LE program in NSW

3. Milestones/Deliverables

Milestone/Deliverable	Date
1. Execution of Agreement Deliverable: signed contract by end May 2017	May 2017
2. Draft evaluation framework and implementation plan Deliverable: submit draft evaluation framework by 19 June 2017	19 June 2017
3. Evaluation framework and implementation plan finalised and submitted Deliverable: submit final evaluation framework by 7 July 2017	7 July 2017
4. Commencement of: a. implementation of evaluation component 1 (review of program documentation and administrative data) b. Development of proposed quantitative and qualitative survey tools in consultation with MOH	10 July 2017
5. Receive approval from UON HREC and SERAP <ul style="list-style-type: none">• UON HREC requires submission of ethics application by 31 August 2017, for the 20 September 2017 meeting• SERAP application can be submitted at any time (it is not dependent on a meeting date) Deliverable: submit proof of approvals to MOH by 27 October 2017	27 October 2017

<p>6. Planning for the implementation of evaluation components 2, 3 and 4 including:</p> <ul style="list-style-type: none"> • pilot quantitative and qualitative survey tools • sample selection • recruitment <p>Deliverable: submit progress report 1 by 13 November 2017</p>	<p>Term 4 2017 (October 2017– December 2018)</p>
<p>7. Data collection period (components 2–4)</p> <p>Deliverables:</p> <p>a. submit progress report 2 by 14 March 2018</p> <p>b. submit progress report 3 by 11 July 2018</p>	<p>Term 1–Term 3 2018 (30 January–28 September 2018)</p>
<p>8. Data analysis and synthesis</p> <p>Deliverable: submit progress report 4 by 12 October 2018</p>	<p>October 2018</p>
<p>9. Draft evaluation report. Report to include:</p> <ul style="list-style-type: none"> - Executive summary in plain English with key points - Introduction - Description of the program - Evaluation methods - Results/findings - Discussion – to include an analysis of the evidence with regards to each of the evaluations key aims and questions, and implications - Reference list - Appendices <p>Deliverable: submit draft evaluation report by 23 November 2018</p>	<p>November 2018</p>
<p>10. Final evaluation report</p> <p>Deliverable: submit final evaluation report by 14 December</p>	<p>December 2018</p>
<p>11. Project close</p> <p>Deliverable: review meeting with MOH</p>	<p>January 2019</p>

REFERENCES

1. Department of Health and Aged Care. Measuring remoteness: Accessibility/Remoteness Index of Australia (ARIA).
2. Trewin D. Information Paper Census of Population and Housing Socio-Economic Indexes for Areas: Australia 2001.
3. WestEd. California Healthy Kids Survey: Alcohol and Other Drugs Module. http://chks.wested.org/wp-content/uploads/hs-aod-1617_watermark.pdf. Updated 2016. Accessed 15-12-2016.
4. WestEd. California Healthy Kids Survey: Elementary School Questionnaire 2016-

2017. <http://chks.wested.org/wp-content/uploads/chks-elem-1617.pdf>. Updated 2016. Accessed 15-12-2016.

5. Centre for Epidemiology and Evidence. School Students Health Behaviour Survey 2014. <http://www.health.nsw.gov.au/surveys/student/Documents/student-health-survey-2014-quest.pdf>. Updated 2015. Accessed 12-12-2016.

6. Hodder R, Daly J, Freund M et al. A school-based resilience intervention to decrease tobacco, alcohol and marijuana use in high school students. BMC Public Health 2011; 11(722):1-33.

SCHEDULE 1: RESPONDENT PARTICULARS

FULL NAME OF RESPONDENT : The University of Newcastle

TRADING AS: The University of Newcastle ADDRESS:

University Drive, Callaghan NSW 2308, Australia

TELEPHONE No.: 02 4924 6247 FACSIMILE No.: 02 4924 6048

EMAIL:

John.Wiggers@hnehealth.nsw.gov.au ABN:

15 736 576 735 ACN: n/a

DECLARATION OF TENDERER

The undersigned hereby:

- States that the Respondent complies fully to all the laws of the State of New South Wales and the Commonwealth of Australia;
- Declares that its response to this Request is made in good faith, based on true and correct information, with the capacity and intent to complete the prospective contract without any need for variation;
- Acknowledges that, if the Respondent is a government business, it complies fully with competitive neutrality policies;
- Understands and agrees to all conditions including, without limitation, obligations and acknowledgement included in the Request, except where expressly indicated in Schedule 2: Statement of Compliance;
- Seeks to provide the services as described at Schedule 3 : Statement of Requirements, at the price stated at Schedule 4: Price and Payments; and

- Accepts the terms and conditions of the Contractual Agreement referred in the Request for the services specified, except where expressly indicated in Schedule 2: Statement of Compliance, and will enter into this Agreement in the event of its submission being accepted.

DATED THIS 20/12/2016. SIGNATURE NAME AND OFFICIAL POSITION HELD

John Wiggers..... (PRINT)

Duly authorised to sign tenders for and on behalf of: The University of Newcastle

SCHEDULE 2: STATEMENT OF COMPLIANCE

The Respondent:

- Agrees to be bound by the terms and conditions of the Request; and
- Accepts the terms and conditions of the Contractual Agreement referred in the Request for the services specified, and will enter into this Agreement in the event of its submission being accepted.

In the event that the Respondent does not agree to any of the terms and conditions of either the Request and/or the Contract, it is to provide a list of all non-compliances in the following table.

Reference	Term or Condition	Comments on why it	Suggested Amendment(s)

It is noted that any non-compliance may exclude consideration of the Respondent's submission.

DATED THIS 20/12/2016 SIGNATURE NAME AND OFFICIAL POSITION HELD

John Wiggers

Professor, School of Medicine and Public Health, The University of Newcastle

(PRINT)

Duly authorised to sign tenders for and on behalf of: The University of Newcastle

LIST OF APPENDICES

Appendix A: *Good for Kids. Good for Life* 2006-2010 Evaluation Report

Appendix B: Prevalence of smoking-proxy electronic inhaling systems (SEIS) use and its association with tobacco initiation in youth

Appendix 1.4. Evaluation Framework

Evaluation Framework

Life Education program (LE) New South Wales (NSW)

Background

The delivery of drug and alcohol school based education is a priority for the NSW Ministry of Health. Life Education (LE) NSW is a community-based, independent preventative drug and health education program delivered to children and young people aged 3–15 years, and their families, across Australia.

LENSW is currently funded by the NSW Ministry of Health, other Government agencies and by donations to deliver preventative drug and health education to NSW school children. In 2015-16, the NSW Ministry of Health also provided an additional one-off grant to improve monitoring systems and support more mobile classrooms and educators to deliver LE programs to an additional 700 low socio-economic status areas over the next 3 years.

The NSW Ministry of Health has commissioned the Sax Institute to undertake a review to identify best-practice approaches for education programs that aim to reduce risk-taking behaviour and promote healthy decision-making in school children. The findings from this review will inform the LE program evaluation.

As such, the primary purpose of the LE program evaluation is to identify whether the program is achieving its intended outcomes as it is currently implemented, and to identify areas for program improvement.

Life Education program overview and rationale

The LE program has been running in NSW for about 30 years and aims to empower children and young people, through education, to live a safe and healthy life. To meet this aim, LE provides a curriculum-based program to school students aged 3–15 years from a mobile classroom. The program is delivered by specially trained educators and includes interactive storytelling approaches,

digital and interactive tools, skills practice, animated videos and the use of character devices. The program also includes print-based and online teacher, student and parent resources. The program objective is to contribute to the health and wellbeing of children and young people by helping them to develop the awareness, knowledge, confidence and skills that they need to make more informed, safer and healthier choices.

The program logic for the LE program is provided below (Figure 1).

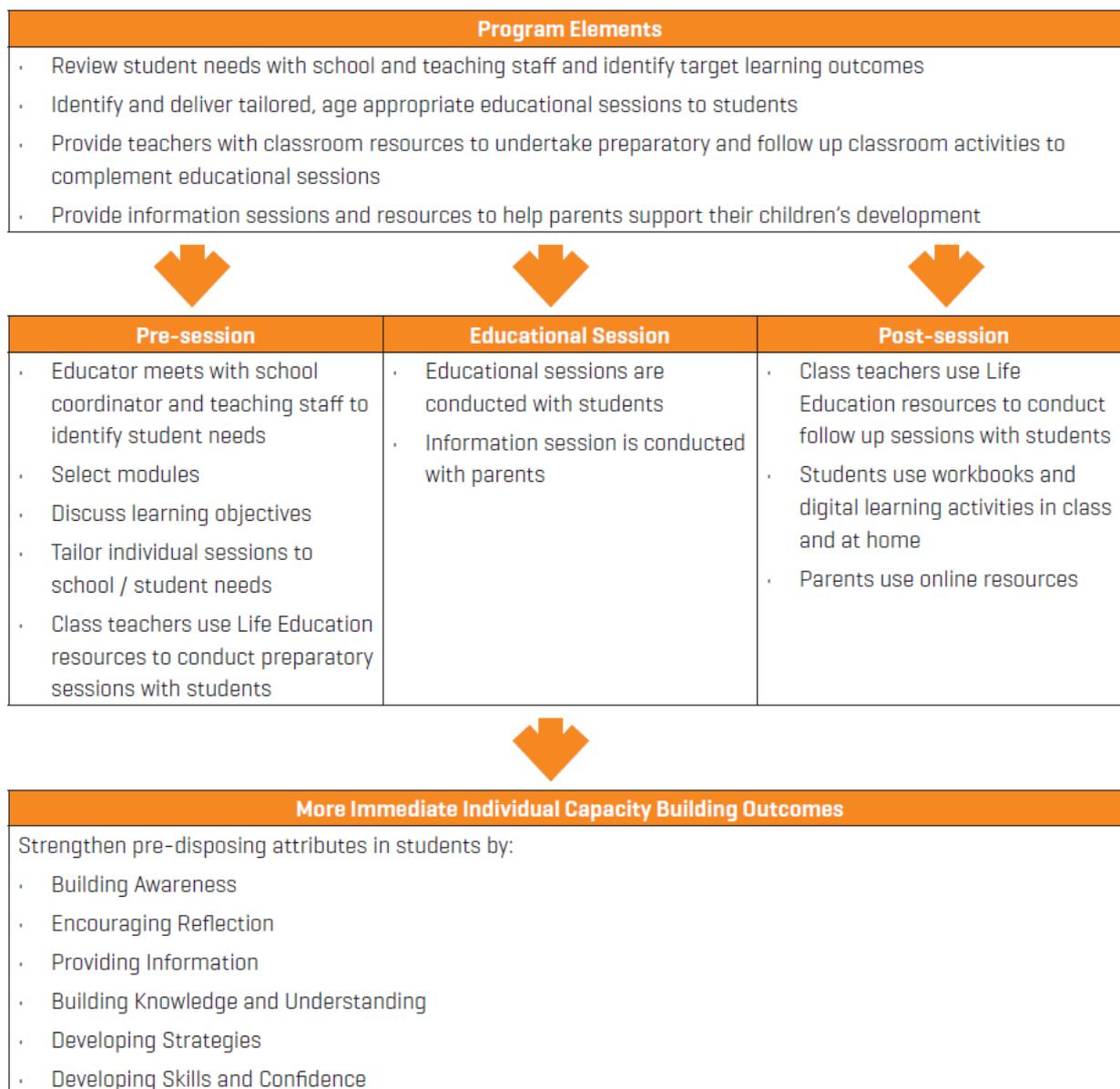


Figure 1. Life Education program logic (Life Education, 2017)

Purpose and objectives of the evaluation

The University of Newcastle (UoN) who have been engaged by the NSW Ministry of Health will undertake a robust evaluation of the LE program. The evaluation will commence in June 2017 and be completed December 2018. The Centre for Population Health, NSW Ministry of Health, will coordinate the evaluation, in collaboration with the Ministry's Centre for Epidemiology and Evidence.

The evaluation seeks to describe the LE program and how it is implemented state-wide, including program reach, and to assess the effectiveness of the program in changing knowledge and intentions.

The specific objectives of the evaluation are to:

1. Describe the LE program model and how it is implemented within NSW schools
2. Assess the population reach and school uptake of the LE program
3. Investigate the short-term impacts of the LE program in grade 5 students including:
 - a. Intentions to use tobacco, alcohol and other drugs in the future;
 - b. Awareness of, knowledge of, attitudes towards and skills in avoiding tobacco, alcohol and other drug use;
 - c. Differential effectiveness on intentions to use tobacco, alcohol and other drugs in the future based on different doses of LE participation;
 - d. Differential effectiveness of LENSW participation on intentions to use tobacco, alcohol and other drugs in the future by tobacco, alcohol and other drug use risk and protective factor characteristics.
4. Document the costs associated with delivery of the LE program in NSW

The evaluation will have multiple components including:

- Review of program documentation and administrative data
- Observations of the delivery of grade 5 LE modules
- Interviews with LENSW administrators and other key informants
- Surveys of school students in grades 5 (prospective data; baseline, immediate follow-up and 6-month follow-up; exposure and control group)
- Surveys and/or interviews with teachers.
- To investigate the impact of LE participation on grade 5 students intentions to use tobacco, alcohol and other drug use in the future within subgroups of students defined by their tobacco, alcohol and other drug use risk and protective factor characteristics.

Audience for the evaluation

The primary audience for the evaluation is the NSW Ministry of Health, Life Education administrators and related stakeholders. It is also anticipated that the results of the evaluation will be of interest to national and international health administrators, policy makers and researchers focused on the prevention of substance use in young people. A number of manuscripts are planned to disseminate the results of the project via national and international journals and conferences.

Detailed description of evaluation components (include research design) and method of implementation

Component 1: Review of program documentation and administrative data

Aim

- To describe the program content and model of implementation of LE across NSW;
- To assess the population reach and school uptake of LE across NSW in 2017;
- To compare the program content and model of implementation of LE across NSW to best-practice approaches for education programs aiming to reduce risk-taking behaviours and promote healthy decision-making in school children;
- To undertake a cost analysis to determine the costs associated with the delivery of the LE across NSW in 2017.

Study design

A desktop review of program documentation and administrative data relating to LENSW will be undertaken for the purpose of describing the LENSW program, how it is implemented within NSW schools and to document the costs associated with the delivery of the LE program in NSW.

Data collection

All available program documentation and administrative data regarding the LE program and its implementation within NSW will be sourced from LENSW. In particular, data will be collected regarding:

- governance structures and processes (including identification of LENSW administrators and other key stakeholders);
- program development;
- reach and uptake of the LE program across the intended target groups in NSW;

- methods of program delivery;
- standards for the delivery including relevant quality indicators of LE across NSW primary schools;
- type and standard of regular data collection and monitoring practices;
- the costs of routinely implementing the program (including staff time to deliver the program, program resource material production, monitoring and quality assurance processes, travel costs to visit school to deliver the program etc).

Analysis

Data collected via the document and administrative data review will be synthesised and described either quantitatively or qualitatively depending on the type of data collected, and using thematic analysis where possible for qualitative data. The methods of program delivery will be narratively compared to the findings from the NSW Ministry of Health commissioned review of best-practice approaches for education programs aiming to reduce risk-taking behaviours and promote healthy decision-making in school children (SAX report) as a gold standard. In particular this will be conducted by:

- reviewing the stated risk and protective factors that LE targets to the evidence-base for risk and protective factors for substance use as synthesised in the SAX report;
- reviewing the stated theoretical model LE is based on against the theories adopted by effective interventions as synthesised in the SAX report;
- reviewing the characteristics of LE to the characteristics of effective programs i.e. dose, mode of implementation, program components eg. involving parents as synthesised in the SAX report;
- reviewing the program delivery of LENSW against the relevant Stage of the PDHPE curriculum;
- providing a clear analysis of where the LENSW delivery meets or falls short of the 'gold standard/best practice' as described in the SAX report.

A cost analysis will be undertaken in collaboration with health economists at Hunter Medical Research Institute using data collected from LENSW regarding implementation during 2017. The analysis will determine:

- the overall expenditure of the primary school program in NSW;
- the average cost per primary school child reached;

- any variations in the cost of program implementation by location (using Accessibility/Remoteness Index of Australia).¹

Component 2: Observations of the delivery of grade 5 LE modules

Aim

- To compare the implementation of LE modules related to tobacco, alcohol and other drug use across NSW to planned implementation and best-practice approaches for education programs aiming to reduce risk-taking behaviours and promote healthy decision-making in school children.

Study design

An observational audit of the delivery of two sessions each of the LENSW modules that relate to tobacco, alcohol and other drug use that are delivered to Grade 5 students will be conducted. The modules include:

- “Decisions” – includes content related to tobacco, alcohol, prescription drugs and illicit drugs;
- “On the case” – content related to tobacco;
- “Think Twice” – content related to alcohol;

Sample

Two Primary Schools each will be randomly selected from those schools that are booked in to each of the four LENSW modules in Term 1 2018 (that is, eight schools in total) and have agreed to participate in the LENSW evaluation (see Component 4). An observational audit will be conducted in each of those eight schools, such that two observational audits of each of the four LENSW modules will be conducted. This will be primarily conducted with classes of Grade 5 students; however Grade 6 will be included for those schools that delivery modules to Grade 5 and 6 together.

Recruitment

UoN HREC and SERAP approval will be sought prior to conducting the observational audit. Following HREC/SERAP approval and receipt of information regarding the LENSW booking schedule for 2018, principals of schools randomly selected will be contacted to obtain consent to undertake the observations.

Data collection

The observational audit of two examples of each of the four LE modules as delivered to grade 5 (or 5 and 6, where delivered concurrently) students will be conducted by a research assistant. An audit tool will be developed to collect data regarding the content and method of delivery of the LE models, which will be piloted prior to the observations. The content of this tool will be informed by the desktop review described in *Component 1* of the evaluation framework. In particular, it is anticipated that the desktop review will identify the planned program content and delivery, and the audit will assess the fidelity to the program plan in each of the observed modules. It is also planned that the audit will also collect information regarding any tailoring of the modules at the request of the school, including variations in content such as whether the 'Decisions' module includes licit drugs only or both illicit and licit drugs.

Analysis

Observational data collected regarding the content and delivery of each LENSW module will be compared to the planned program delivery. Results of this comparison will be described either quantitatively or qualitatively depending on the nature of the data collection, and using thematic analysis where possible for qualitative data in the final report.

Component 3: Telephone interviews with LENSW administrators and key stakeholders

Aims

- To undertake a qualitative evaluation of the implementation of LE across NSW.

Study design

A semi-structured telephone interview will be conducted with a sample of LENSW administrators and other key stakeholders to further understand the implementation of the LE program within NSW.

Sample

LENSW administrators and educators, school teachers and other key stakeholders that are involved in the delivery of the LE program will be invited to participate in the structured interview by telephone. Consideration will be given to the backgrounds and perspectives of all participants with respect to designing the data collection tools. The participants that will be invited to participate in

the telephone interviews will be identified, and the interview items drafted in collaboration with LENSW, MOH and the Department of Education (DoE). Thirty interviews are planned, however consideration for additional interviews outside of the allocated budget will be conducted in consultation with MOH, to include for example National Life Education, NSW DOE, MOH, school principals, Aboriginal Education Consultants and the NSW Aboriginal Education Consultation Group.

Data collection

Data will be collected via a semi-structured Computer Assisted Telephone Interview (CATI). The questions will be refined in collaboration with LENSW, MOH and DoE following implementation of

Component 1 of the evaluation, however they will include items such as:

- where relevant, which LE modules that they have been responsible for delivering (LENSW administrators and educators only);
- which LE modules they have observed being delivered (school teachers only);
- perception regarding the LENSW implementation model, including the way the program is delivered (i.e. selection of modules, mode of delivery, provision of parent and curriculum resources); usefulness of program components (i.e. face-to-face LE module delivery, parent resources, curriculum resources); how LE is embedded within curriculum and vice versa; quality of the partnerships between LE and schools; and the age-appropriateness of the content delivered;
- perceived utility of program components/approaches including interactive storytelling approaches, digital and interactive tools, skills practice, animated videos and the use of character devices;
- where relevant, confidence in the delivery of the LE NSW modules and components.

Experienced interviewers, employed by the UoN, will be trained specifically to conduct the structured interviews. The interviews will be conducted using the HNEPH (Hunter New England Population Health) CATI system.

Analysis

Responses from the CATI will be coded as required and thematic analysis undertaken to identify key themes. Results will be summarised either quantitatively or qualitatively dependent on the nature of data, and using thematic analysis where possible for qualitative data in the final report.

Component 4: Self-administered surveys with school students in grade 5 to assess short term impacts of LENSW

Aims

- To investigate the immediate and short-term effectiveness (6 months post-intervention) of participation in one or more LE modules targeting tobacco, alcohol or other drug use on Grade students self-reported:
 - Intentions to use tobacco, alcohol or other drug use in the future (primary outcome);
 - Awareness, knowledge, attitudes of tobacco, alcohol and drug issues (secondary outcome);
 - Awareness of options to avoid, and confidence in avoiding risk (secondary outcomes).
- To investigate any immediate or short-term differential effectiveness by differing levels of LE participation on Grade 5 students self-reported intentions to use tobacco, alcohol or other drugs in the future;
- To investigate the impact of LE participation on grade 5 students intentions to use tobacco, alcohol and other drug use in the future within subgroups of students defined by their tobacco, alcohol and other drug use risk and protective factor characteristics.

Study design

A wait-list controlled pre-post study will be conducted to assess the short terms impacts of LENSW in grade 5 students attending government primary schools within New South Wales.

Sample

Schools

A quota of 30 schools will be recruited to participate in the evaluation, 15 intervention and 15 control schools. Eligible intervention schools will be randomly selected from those schools who have one of the four LENSW modules of interest booked for grade 5 students during Term 1 2018, and eligible control schools randomly selected from those who have one of the four LENSW modules of interest booked for grade 5 students in Term 3 or 4 2018. Consultation will be undertaken with LENSW to determine whether sampling from Term 4 will be an issue logistically. All eligible schools across NSW will be stratified according to their characteristics (including number of enrolments,

geographic location,¹ socioeconomic disadvantage²), randomly ordered and their principals invited in that order to participate in the study until a quota of 15 intervention and 15 control schools is achieved.

Students

All Grade 5 students from at each participating intervention and control school scheduled for at least one of the LENSW modules of interest will be eligible to participate. In schools with more than two grade 5 classes that have information available in Term 4 2017 regarding class structure for the following year, two classes will be randomly selected and students from that class invited to participate.

Recruitment and consent

Schools

To recruit schools, principals will be sent a letter informing them about the study and requesting written consent for their school to participate. Within one week from the initial information letters being sent, research staff will contact non-responding principals to answer any questions they may have and to prompt their reply. Principals who do not reply within a further week will receive additional prompts from research staff. If a school declines to consent the next school on the list will be invited, following the same procedure above. The reasons for declining participation in the evaluation will be sought from principals. Consideration will be given regarding whether schools could be offered an incentive to participate in the evaluation, however previous advice suggests this may not be supported from Human Research Ethics Committees.

Following consent, permission will be sought from the principal of each participating school to obtain the contact details of a School Liaison and Aboriginal Education Officer to contact regarding the process of obtaining parental consent for student participation. This strategy has been used successfully by the UoN team to engage with school communities and maximise parental consent rates for student participation in research.

Students

The parents of eligible students at participating schools will be mailed an information letter (as approved by UoN HREC and SERAP), a letter from the school principal regarding the school's participation in the LE evaluation, a parental consent form for student participation in the evaluation of LENSW and a reply paid envelope to return the consent form. The information letter will include

contact details of study investigators and an Aboriginal member of the research team should parents require more information regarding the study. This approach is based on Aboriginal community advice from previous work conducted by the research team to ensure that appropriate recruitment methods are undertaken such that Aboriginal children are not disadvantaged or excluded from participation in the survey. The names and mailing addresses of parents will be obtained from schools and casual DoE staff will be employed to mail out the information packs in line with Privacy Act requirements. Two weeks following distribution of the information pack to parents, non-responding parents will be followed up by telephone by school staff. School staff will receive training in conducting the telephone prompts. Schools will be reimbursed for the telephone prompting of parents. A freecall number will also be listed on the information letter to parents, such that parents can opt out of being contacted by telephone to prompt for parental consent. This strategy has been used successfully in various studies conducted by the evaluation team to maximise parental consent for student participation.

Data collection

Participating grade 5 students will complete a confidential pen and paper survey immediately prior to attending the LENSW module (baseline), immediately following participation in the LENSW module (immediate follow up) and 6 months following (6 months follow up) participation in the LENSW module (see Figure 1). Casual UoN research staff will be employed to travel to each of the participating schools and administer the survey during class time in each school. As per the Department of Education and Communities duty of care, a school teacher will be required to be present whilst students are completing the survey. In line with HNEPH Aboriginal Recruitment strategy, 20% of the casual UoN research staff positions will be identified Aboriginal and/or Torres Strait Islander staff.

The survey will collect data regarding student demographic characteristics and a range of outcomes and factors associated with related to tobacco, alcohol and drug behaviours (see measures section below). An item will be included in the survey to assess the Aboriginality of students which advice to dates suggests AH&MRC approval will be required. However if AH&MRC approval is not able to be obtained prior to the start date for the student survey the item will be removed from the survey.

Data will also be obtained via *Component 1* of the evaluation regarding each participating school's participation in other LE modules both in 2017 and previously.

	Term 4 2017	Term 1 2018	Term 2 2018	Term 3 2018	Term 4 2018
School recruitment	X				
Parent consent	X				
Baseline survey		X			
Follow up survey - immediate		X			
LE module delivery		Intervention schools			Control schools
Follow up survey – 6 months				X	

Figure 2. Study design

Measures

The primary outcome is Grade 5 student intentions regarding future tobacco, alcohol and other drug behaviours as measured by items sourced from a survey used in a previous evaluation of the LE (QLD LE evaluation). Secondary measures include:

- Awareness and knowledge of tobacco, alcohol and drug issues (QLD LE evaluation);
- Attitudes regarding tobacco, alcohol and drugs (QLD LE evaluation);
- Awareness of options to avoid risk behaviours (CHKS for elementary school aged children);
- Confidence in avoiding risk behaviours (CHKS for middle school aged children).

Data will also be collected regarding a number of variables that may assist with the interpretation of the study results. These items will be kept to a minimum to ensure feasibility of implementation.

These additional items include:

- Participation in other tobacco, alcohol or drug education programs (ASSAD)
- Tobacco, alcohol or drug use risk (e.g. peer/family member use, mental health indicators, physical health including experience of pain) and protective factors (e.g. caring relationships with adults and peers) (California Healthy Kids Survey for elementary aged students)

The survey items regarding participation in other tobacco, alcohol and drug education programs will be included in both intervention and control student surveys. This item may help to explain any null effect on intentions to use in the future if control students have participated in other drug and alcohol programs other than Life Education.

The survey items regarding risk and protective factors of tobacco, alcohol and other drug use will be included in both intervention and control student surveys. Risk factors are defined as those factors that are associated with an increased likelihood of initiation to tobacco, alcohol and other

drug use, whereas protective factors are defined as those factors associated with a decreased likelihood of initiation to tobacco, alcohol and other drug use. A large body of research has identified a range of risk and protective factors that are associated with initiation to tobacco, alcohol and other drug use. Various models of adolescent substance use prevention, such as the Social Development Model and models of resilience, propose that protective factors operate by mediating or buffering the effects of risk factors, or that risk factors dampen the effect of protective factors where they occur together. Studies have found that the more risk factors that are present the greater likelihood that young people will initiate tobacco, alcohol or drug use. Those risk and protective factors with the strongest association with initiation to tobacco, alcohol and other drug use, deemed appropriate to be asked of Grade 5 students, will be included in the survey. These items will be used to explore any null effect of intentions to use tobacco, alcohol or other drug use in the future by investigating any differential intervention effects within student subgroups defined by these risk and protective factors.

All primary and secondary outcomes will be assessed using items from existing student surveys where available. The content of the student survey will be co-developed by UoN and MOH following development of the evaluation framework, as per the LENSW agreement. A draft proposed student survey is included as an appendix to this evaluation framework (Appendix A – draft proposed student survey).

The student survey will be piloted in a sample of Grade 5 students prior to use, and any suggested modifications to improve the understanding and readability of the survey items adopted prior to the implementation of the baseline student survey. The survey will also be reviewed by the HNEPH Population Health Aboriginal Cultural Determinants Committee to identify any modifications that may be required to the survey to improve the understanding and readability of the survey for Aboriginal and/or Torres Strait Islander students.

Statistical analysis

Comparison between groups in the prevalence of student-report of all measures at immediate and 6 month follow up will be undertaken to determine the effectiveness of the intervention using generalised linear mixed models (binomial distribution with a logit link) for categorical variables and linear mixed models for continuous variables. All models will include a fixed effect for treatment group (intervention versus control) and a random effect for each school to account for clustering of

responses within schools. Odd ratios or mean differences with 95% Wald confidence intervals will be calculated.

It is anticipated that there will be varying levels of school participation in LE modules, both those modules with and without specific content regarding tobacco, alcohol and drug use. In recognition of this, a variable will be created to represent school-level dose of LE modules and an exploratory subgroup analysis conducted to identify any cumulative effects of participation in the program on the primary outcome.

Whilst methods are being adopted to ensure the cultural appropriateness of recruitment and data collection from Aboriginal or Torres Strait Islander students, no specific targeting of, or data analysis in relation to, Aboriginal children will be undertaken.

Sample size

In consideration of school-based research undertaken by the evaluation team using the same methodology, it is estimated that consent will be obtained for 70% of students to participate. Based on this participation rate, an estimated 50 grade 5 students per school, and a sample of 30 participating schools, it is estimated that 1050 grade 5 students will participate in the survey at baseline and 945 at follow up (10% attrition over 6 months). Assuming 80% power, a 5% significance level, an intra-cluster correlation of 0.01, and conservative estimate of grade 5 control group prevalence of 50% for all measures, it is estimated the study will be able to detect an absolute reduction in prevalence of intentions to use tobacco, alcohol and drug use of 10% in intervention compared to control students.

Data management

All data collected from students will be de-identified, with each student being allocated a unique study number. Any information stored electronically will be stored in a confidential file on a password-protected computer web server and back-up discs will be stored in a lockable cabinet. Paper copies of consent forms and questionnaires will be kept in secure storage and destroyed 5 years after completion of the study. Only group results will be reported in publications, no individual student will be able to be identified.

Data matrix – mapping key evaluation questions to evaluation components (data collection)

Evaluation questions	Component 1: Desktop review	Component 2: LE module Observations	Component 3:	Component 4: Student surveys
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Interviews with
LENSW
stakeholders

<p>Narrative description of the LE program model, including how it is implemented within NSW schools, standards for the delivery including relevant quality indicators across NSW primary schools, type and standard of regular data collection and monitoring practices</p>		
<p>Assess the implementation of the LE program in NSW compared to the planned LE program model</p>		
<p>Examine the population reach and school uptake of the LE program across NSW in 2017</p>		
<p>Describe the costs associated with the delivery of the LE program in NSW in 2017</p>		
<p>Qualitative evaluation of the implementation of LE across NSW as reported by LENSW stakeholders including the perceptions regarding program delivery, utility of program components/approaches, and where relevant confidence in delivering the LENSW modules.</p>		
<p>Examine the immediate and short-term effectiveness of participation in one or more LE modules targeting tobacco, alcohol and drug use on Grade 5 student self-reported:</p> <ul style="list-style-type: none"> - intentions to use tobacco, alcohol or drugs in the future (primary outcome) - Awareness and knowledge of tobacco, alcohol and drug issues (secondary outcome) - Attitudes regarding tobacco, alcohol and drugs (secondary outcome) - Awareness of options to avoid risk behaviours (secondary outcome) - Confidence in avoiding risk behaviours (secondary outcome) 		
<p>Examine any immediate or short-term differential effectiveness by differing levels of LE participation on Grade 5 student self-reported intentions to use tobacco, alcohol or drugs in the future</p>		

Roles and responsibilities

The University of Newcastle team

The UoN team will be responsible for implementing all aspects of the LE evaluation as per the above and the HAC agreement.

Professor Wiggers will provide oversight and direction for all aspects of project including scientific expertise in study design, measures, analysis, reporting and implementation, and will chair the advisory group.

Day-to-day project management will be the responsibility of Ms Hodder, who will report directly to Professor Wiggers. Ms Hodder will develop the evaluation framework for the completion of the research; liaise with the Ministry of Health, LENSW and relevant stakeholders; and operationalise the methodology including the collection of data, data analysis and drafting of reports.

Dr Nathan, will provide advice and input regarding survey methodology and liaison with schools. Ms Gillham will provide advice and guidance on project management, with particular focus on liaison with education stakeholders. Associate Professor Wolfenden and Associate Professor Bowman will provide scientific expertise in study design, measures, analysis and reporting.

Following receipt of funding, a Research Manager and Research Assistant will be employed to implement the study. Casual Research Assistants will also be employed to conduct the observational audit of LE modules and administration of the student survey in participating schools.

Ethical considerations

UoN will seek approvals from relevant bodies, including the University of Newcastle Human Research Ethics Committee and the State Education Research Applications Process (SERAP). This will involve preparing and revising application(s) and related documentation and responding to inquiries and requests from the relevant committees. In seeking approvals, UoN will liaise with the LE Evaluation Advisory Committee as required. Feasible timelines for obtaining these approvals have been considered in project planning and related contractual agreements.

The project will include active management of the Human Research Ethics Committee (HREC) process and State Education Research Applications Process (SERAP) to minimise delays. This includes:

- Provision of a brief outline of the proposed research to SERAP

- Meeting with representatives from the relevant DoE divisions and the Manager, SERAP, regarding the proposed research, and outlining the research methods including the study design, sampling methodology, planned surveys and issues related to duty of care and confidentiality. The purpose of the meeting will be to obtain advice and endorsement from the representatives regarding the proposed evaluation methods
- Preparation of concurrent submissions to the University of Newcastle HREC and SERAP
- Request an expedited review from SERAP
- If required, obtain advice regarding any requested changes to the research proposal for SERAP approval to be granted. This will involve consultation with the relevant DoE division representatives and Manager, SERAP.

Approval will also be sought from AH&MRC based on advice such approval is required to include an item regarding Aboriginality in the student survey. Written support from Aboriginal controlled organisations within the study areas will be required to receive AH&MRC approval. The regions and appropriate Aboriginal controlled organisations to consult with regarding the evaluation will not be known until after SERAP approval is received and eligible schools recruited. In the context of the short timeframe and the consecutive nature of obtaining relevant approvals for the evaluation, the planned item regarding Aboriginality will not be included in the student survey if AH&MRC approval is not received prior to the implementation of the student survey.

Governance

LE Evaluation Advisory Committee

The LE Evaluation Advisory Committee has been established to oversee and advise on: the development and implementation of the evaluation; the procurement and management of the external evaluation organisation; and the interpretation and reporting of the evaluation findings. The Committee includes representatives from: NSW Ministry of Health and the NSW Department of Education.

The external evaluation organisation will be expected to liaise with the LE Evaluation Advisory Committee throughout the project, particularly in relation to:

- Developing the final evaluation framework and implementation plan;
- Obtaining appropriate approvals for the evaluation;
- Engaging key stakeholders, including schools;

- Use, interpretation and management of data;
- Managing emerging issues and risks;
- Progress against project milestones; and
- Reporting of evaluation findings.

LE Evaluation Project Management Team

A project management team from the Centre for Population Health and the Centre for Epidemiology and Evidence will oversee the day to day running of the project and will be actively involved and in regular contact with the external evaluation organisation. It is expected that the Centre for Population Health project management staff and representatives of the external evaluation organisation will meet regularly.

Contract Review Meetings

Contract review meetings will be held when the Evaluation Implementation Plan is submitted and following achievements of milestones and may be face to face or via teleconference.

UoN Project Management Team

A project management team from the UoN will be formed of all investigators, the Research Manager and Research Assistant. This team will meet regularly to monitor the day to day running of the project as per the agreed timelines in the HAC agreement. It is anticipated that this team will meet at least fortnightly to monitor the progress of the evaluation.

Implementation timeline

Phase 1: Commencement of contract, MOH approval of evaluation framework and ethics submissions

May 2017	<p>Commencement of Contract/Execution of agreement</p> <p>Obtain final Sax Institute review of best-practice approaches for education programs to reduce risk-taking behavior and promote healthy decision-making in school children.</p> <p>Obtain all relevant administrative and costing data from LE NSW for desktop review to inform development of evaluation framework</p> <p>Deliverable: signed contract by end May 2017</p>
1-19 June 2017	<p>Drafting final evaluation framework (inclusive of survey tools and analysis plan) and implementation plan</p> <p>Deliverable: submit draft evaluation framework by 19 June 2017</p>
20 June – 7 July 2017	<p>Amend evaluation framework, implementation plan and ethics submissions as per comments from LE Evaluation Advisory Committee and the Centre for Population Health</p> <p>Deliverable: submit final evaluation framework by 7 July 2017</p>

21 July 2017	Approval of Evaluation Framework from LE Evaluation Advisory Committee and the Centre for Population Health by 21 July to enable sufficient time to enable consultation with SERAP prior to submission of ethics applications to HREC and SERAP by 31 August 2017 Development of quantitative and qualitative tools in collaboration with LE, MOH and DoE
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Phase 2: HREC/SERAP approvals received and commencement of evaluation component 1

31 Aug 2017	Submission of ethics and SERAP applications
25 Sep 2017- 6 Oct 2017	School holidays
31 Aug 2017 – 27 Oct 2017	Commence desktop review and cost analysis of LE implementation within NSW
27 Oct 2017	Receive approval from HREC and SERAP to undertake evaluation Deliverable: Submit proofs of approvals to MOH by 27 October 2017

Phase 3: Commencement of evaluation components 2,3,4

The following dates are subject to HREC and SERAP approval in October 2017. Should this not occur, the anticipated dates for the following steps will be adjusted as per the duration of the delay in obtaining approvals.

Term 4 2017	Commence implementation of evaluation components 2,3,4 Random selection of eligible primary schools Recruitment of schools: Send information letters and consent forms to school principals regarding observational visits and student surveys, prompt as required for consent until quota of 30 schools achieved Implement engagement strategies with participating schools Randomly select classes to participate Active parental consent for student participation: obtain parent contact details from schools, employ school staff to send information packs to parents, telephone prompting of non-responding parents Pilot quantitative and qualitative surveys (including piloting student survey with Grade 5 students) Deliverable: submit progress report 1 by 13 November 2017
Term 1 30 Jan – 13 Apr 2018	Conduct observational visits (Component 3) Administer baseline and immediate follow up student surveys in participating intervention and control schools (Component 4) Deliverable: submit progress report 2 by 14 March 2018
Term 2 1 May – 6 Jul 2018	Conduct telephone interviews with LE stakeholders (Component 2) Report drafting evaluation components 1, 2 and 3 Data cleaning of baseline and immediate follow up student survey data Deliverable: submit progress report 3 by 11 July 2018
Term 3 24 Jul - 28 Sep 2018	Administer 6 month follow up student surveys in participating intervention and control schools (Component 4)

Phase 4: Report drafting

October 2018	Data analysis and synthesis of findings for Component 4 Deliverable: submit progress report 4 by 12 October 2018
November 2018	Drafting of evaluation report Deliverable: submit draft evaluation report by 23 November 2018
December 2018	Receive comments back from MOH by 30 th November Address comments and finalise evaluation report Deliverable: submit final evaluation report by 14 December 2018

January 2019	Project close Deliverable: review meeting with MOH
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Reporting and dissemination

Progress reports regarding the Life Education evaluation will be submitted to the HAC as per the following schedule:

- First progress report due 13 November 2017
- Second progress report due 14 March 2018
- Third progress report due 11 July 2018
- Fourth progress report due 12 October 2018

A draft evaluation report will be submitted to HAC on 23rd November 2018 inclusive of the following:

- Executive summary in plain English with key points
- Introduction
- Description of the program
- Evaluation methods
- Results/findings
- Discussion – to include an analysis of the evidence with regards to each of the evaluations key aims and questions, and implications
- Reference list
- Appendices

The final report is due to be submitted to HAC on 14th December 2018

A number of manuscripts are planned to disseminate the results of the evaluation and related data. These will be developed as per the HAC agreement.

Chapter 2

Appendix 2.1. Life Education documents accessed

	Document Name	LE provided/ publically available
Life Education Educator	Decisions educator manual	LE provided
	Decisions class needs tailoring options (needs assessment)	LE provided
	On the Case educator manual	LE provided
	On the Case class needs tailoring options (needs assessment)	LE provided
	Think Twice educator manual	LE provided
	Think Twice class needs tailoring options (needs assessment)	LE provided
	Coordinator Pack Example	LE provided
School teacher	Teacher Decision manual and resources	LE provided
	Teacher On the Case manual and resources	LE provided
	Teacher Think Twice manual and resources	LE provided
	Example school newsletter snippets	LE provided
	Copy of teacher survey	LE provided
	Copy of school coordinator survey	LE provided
Students	Decisions student workbook	LE provided
	On the Case student workbook	LE provided
	Think Twice student workbook	LE provided
Parents	Parent information Decisions - 5 steps to safe decision-making - Decisions post visit note to parents and carers - Helping our children avoid being under the influence of others - How to talk about drugs with your child	Publically available
	Parent information One the Case module - what is it about?	Publically available
	Parent information Think Twice factsheet - keeping safe around alcohol	Publically available
Publications and media	Life Education NSW Organisation Chart 2018	LE provided
	Adequacy and appropriateness of prevention and treatment services for alcohol and illicit drug problems in Western Australia	Publically available
	Constitution of Life Education Australia 2012	Publically available
	Hawthorne_1992_Primary school drug education: an evaluation of Life Education Victoria	Publically available
	Hawthorne_1995_Does Life Education's drug education programme	Publically available
	Hawthorne_1996_The social impact of Life Education estimating drug use	Publically available
	Life Education Australia - Donor Update 2016-17	Publically available
	Life Education Australia 2015-16 Annual Report	Publically available
	Life Education Australia 2016-17 Annual Report	Publically available
	Life Education Australia 2017-18 Annual Report	Publically available
	Life Education Australia Financial Report 2012-2013	Publically available
	Life Education Australia Financial Report 2013-2014	Publically available
	Life Education Foundation Annual Report 2015	Publically available
	Life Education NSW 2016-17 Annual Report	Publically available
	Life Education NSW 2017-18 Annual Report	Publically available
	Life Education Our Evidence Base An Executive Summary March 2016	Publically available
	Life Education Our Evidence Base An Executive Summary March 2017	Publically available
	Life Education program evaluation 2014	Publically available
	Life Education Program Evaluation Executive Summary 2014	Publically available

	Life Education QLD Communities for Children Evaluation Feb 2017	Publically available
	Life Education QLD Module Evaluation Term 3 and 4 2015	Publically available
	Life Education Year in Review 2013	Publically available
	Life Education Year in Review 2014	Publically available
	Report to Life Education Australia 2017 Review of current theoretical and design principles underpinning the Life Education Program	Publically available
	The millions of choices campaign brochure	Publically available
	Partner with Life Education marketing poster	Publically available
	Public Submission – draft national tobacco strategy 2010-2018	Publically available
	Report to LEA Best practice in drug education as applied to life education Australia 2006	Publically available
	Response to Australia's national drug strategy	Publically available
Links to the PDHPE Syllabus	Life education and the Australian curriculum 2018	Publically available
	Life Education NSW Program Syllabus 2017	Publically available
	PDHPE K-10 syllabus 2018	Publically available
	Links to the Australian curriculum for On the Case	Publically available
	Links to the Australian curriculum for Think Twice	Publically available
	Links to the Australian curriculum for Decisions	Publically available
	Links to the NSW PDHPE 1999 and 2020 for On the Case	Publically available
	Links to the NSW PDHPE 1999 and 2020 Think Twice	Publically available
	Links to the NSW PDHPE 1999 and 2020 for Decisions	Publically available

Appendix 2.2. Life Education preschool and primary school non-drug and alcohol modules*

Module	Year	Content
Harold's Healthy Play Day	Preschool	Explore the importance of healthy food and drinks, physical activity, hygiene and rest in their everyday lives.
Harold's Thankful Heart	Preschool	Explore the concepts of gratitude and thankfulness. Some examples include helping build a sandcastle with a friend, sharing a swing with a friend, and reaching out to a lonely friend.
My Body Matters	K	<ul style="list-style-type: none"> • The importance of personal hygiene • Choosing foods for a healthy balanced diet • Benefits of physical activity and sleep • Ways to keep safe at home, school and in the community
Harold's Friend Ship	K-1	<ul style="list-style-type: none"> • How to build friendships and care for others • Feelings and emotions • Safe and unsafe situations and early warning signs, and safe places and people to turn to for help
Ready Steady Go!	1	<ul style="list-style-type: none"> • Benefits of physical activity • Safety strategies in different environments • Identifying how our body reacts in new situations • What our body needs to be healthy including nutrition, water, and sleep
Safety Rules	1-2	<ul style="list-style-type: none"> • Recognising safe and unsafe environments • How to care for others • Behaviours that maintain friendships • Places and people who we can go to for help
Growing Good Friends	2	<ul style="list-style-type: none"> • Explore what health messages mean • Identify safety signs • Recognise how physical activity and nutrition contribute to a healthy lifestyle • Explore how positive relationships benefit our health and wellbeing
bCyberwise	3-5	<ul style="list-style-type: none"> • Building positive relationships with online and offline friends • Safe and respectful behaviour online • Responsible behaviours when using communication technology • Strategies for keeping personal information safe online • Strategies to deal with face to face and cyberbullying • Exploring the role of bystanders
Relate, Respect, Connect	5-7	<ul style="list-style-type: none"> • Understanding how to respect ourselves and others • Identifying characteristics of positive relationships • Strategies to help maintain positive online and offline relationships • Strategies to respond to unsafe or disrespectful situations online and offline • The importance of relationships to our own and others wellbeing

*All information from the Life Education website

Appendix 2.3. Activities undertaken when developing content and an example as it relates to the most recent version of the Decisions module

CONTENT DEVELOPMENT ACTIVITY	EXAMPLE AS RELATES TO DECISIONS
<p>Determine Life Education Learning Outcomes - Content Descriptions for the module and the alignment with the Australian Curriculum. All content and resources are developed to meet these LE learning outcomes.</p>	<p>Ref: Decisions curriculum documents in the online resources.</p>
<p>Establish Project Team and Reference Group and identify references sources to support content development. Content is:</p> <ul style="list-style-type: none"> • Developed with advice and assistance from a range of health and education professionals, and Life Education Australia partners. LE conducts phone, email and face to face consults as required, around the development of educator, parent, teacher and student resources with agencies and content experts who have a common purpose , expertise, and/or research capabilities in an effort to: raise awareness of the work we are doing in schools, ensure our messages are consistent, develop unique resources in line with best practice and ensure existing resources are utilised to their full potential. • Informed by the best available evidence about school health and drug education and young children's health. • sourced and referenced against government and other reputable health agencies – 	<p>Internal Lead Educators – Teaching professionals currently working in schools. Identified for their relevant experience and expertise in delivering drug and health education in a range of communities across Australia. National Manager Program Development National Training Manager / Curriculum Writer IT, Marketing and Partnerships</p> <p>Consultants and Sources Representatives from the Australian Drug Foundation and Turning Point Dr Justin Coulson- Psychologist/Parenting researcher and author St Johns Ambulance Australian Drug Foundation http://www.adf.org.au/ Meyer, L., & Cahill, H. (2004). Principles for school drug education. Canberra: Australian Government Department of Education, Science and Training Health Promoting Schools Framework developed by the World Health Organization Turning Point http://www.turningpoint.org.au/ National Health and Medical Research Council www.nhmrc.gov.au/ Positive Choices https://positivechoices.org.au/ Drug Aware http://drugaware.com.au/ Department of Health and Ageing www.alcohol.gov.au www.drinkingnightmare.gov.au Drinkwise Australia www.drinkwise.com.au Alcohol Think Again http://alcoholthinkagain.com.au/ ASMI – Australian Self Medication Industry www.asmi.com.au (Consumer information) Asthma Australia www.asthmaaustralia.org.au Diabetes Australia www.diabetesaustralia.com.au/en/Resources/ Therapeutic Goods Administration www.tga.gov.au/ Tobacco in Australia www.tobaccoinaustralia.org.au/ QUIT www.quit.org.au Action on Smoking and Health www.ashaust.org.au Smarter than Smoking www.smarterthansmoking.org.au/</p>
<p>Brief and engage development partners with the capacity to develop resources for Educators Teachers, Student and Parents To keep our content realistic and credible in line with our evidence base, where possible, we engage students and teachers to test and feedback into the creation and design of content. This process could be actioned through our developers or through our educators.</p>	<p>Kimberling Education -Their team is a unique blend of skills covering: curriculum development, educational leadership, creative educational learning design, across digital and print environments. http://kimberlineducation.com/</p>

<p>Content development workshop with agency and working group</p> <p>The aim of these workshops is to:</p> <ul style="list-style-type: none"> • Develop a creative context, storyworld and and/or scripts and storylines that offers the most engaging way to deliver the content through the various Life Education platforms and channels. • Determine what assets and activities are needed to assist in meeting the learning outcomes • Ensure the content mix is sufficiently challenging and varied. • Consider the content creation within budget constraints 	
<p>Development of the content and assets and ongoing consultancy, testing and feedback with Life Education, developers, content experts, teachers, students, lead educators</p>	<p>Decisions includes a breadth and depth of resources for educators, teacher, students and parents totalling over 70 original assets.</p> <p>Educator</p> <ul style="list-style-type: none"> • Purpose built application designed and developed for Life Education housing original content in a flexible format from a central menu page • Digital Learning assets that offer a range of learning experiences for students to e.g. consider, select and reflect, clarify, review, decide, value and discuss the content. <p>Assets include:</p> <ul style="list-style-type: none"> • Animations, to stimulate discussion about responsible behaviour • Videos, illustrating the effects of stimulants, depressants and hallucinogens • Vox Pops , games and quizzes to reinforce understanding <p>For Teachers and Students:</p> <ul style="list-style-type: none"> • Pre and Post Visit lessons • Links to useful websites and background information • Links to the Australian Curriculum • Online interactive activities • Link to online teacher survey <p>For Parents and Carers:</p> <p>Web based accessible</p> <p>3 tip sheets, 3 short videos and easy to read information to encourage and guide family discussions about safe decision-making.</p> <ul style="list-style-type: none"> - <i>How to talk about drugs with your child</i> - <i>5 steps to safe decision making</i> - <i>Helping our children avoid being "under the influence" of others</i> <p>6 Additional short videos on complementary themes- e.g, LE Approach to Drug Education, Good News, How to talk to your children about drugs?</p>
<p>Development of related training materials and face to face training of educators.</p> <p>Teaching and learning resources are developed to support Educators to the deliver the module. These include a range of digital assets, props and interactive activities catering to a range of learning styles.</p> <p>Educator Professional Development is facilitated by National Training</p>	<p>Ref : Educator training manual and LMS</p> <p>Support agency; ADF</p>

<p>Manager - Life Education Australia and State Training Managers in conjunction with outside agencies. Educators are provided with a comprehensive training manual to support PD and delivery.</p>	
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LE=Life Education

Table 2.4. Teaching Methods Department of Health Evaluation 2018

CRITICAL ELEMENT: Employ effective teaching and learning strategies	
Cater for individual differences within each group in terms of teaching approaches, learning materials and props.	<p><i>Evident when for example when the educator provides opportunities such as:</i></p> <ul style="list-style-type: none"> - hands on/tactile activity - paired, small group discussion/activity - writing/recording answers and ideas - listening - viewing - reading
Modify the session to reflect the sensitivities to meet needs of target group.	<p><i>Evident when the educator for example:</i></p> <ul style="list-style-type: none"> - models, supports and encourages positive exchanges with and between students - uses non-discriminatory language - discourages put downs - provides opportunities for all students to contribute - uses strategies to encourage students to work with others outside their friendship groups - teaching aids have a balance of visual and text - uses verbal and non-verbal communication - speaks clearly - gives clear explanations
Utilise active and interactive strategies in program implementation	<p><i>Evident when the educator for example</i></p> <ul style="list-style-type: none"> - provides paired, small group learning opportunities - uses ranking activities such as values continuums - provides opportunities for students to practice the skills of problem solving, decision making, negotiation, communication and collaboration e.g. <i>SEARCH</i> - uses role play as a way for students to rehearse their decisions - creates a learning environment that requires participation - utilises relevant teaching aids to trigger discussion and activity - uses content that is relevant to students
Utilise strategies such as role play for students to construct their knowledge to convey it to others.	<p><i>Evident when the educator for example:</i></p> <ul style="list-style-type: none"> - uses techniques such as Freeze Frames, Hidden thoughts, Interviews, Advice panels, Simultaneous role-play, Fishbowl - uses <i>SEARCH</i> problem solving model
Engage students in reflective activities to apply knowledge.	<p><i>Evident when the educator for example:</i></p> <ul style="list-style-type: none"> - uses debriefing questions after paired or small group work e.g. role play - rehearses decisions/solutions using role play activities - scenario based group activities
Demonstrate the use of and purpose of puppets/Harold for each module.	<p><i>Evident when for example:</i></p> <ul style="list-style-type: none"> - the Harold routine has a clear purpose and relates to the outcomes of the module - basic techniques i.e. movement, positioning, expression are used - a variety of routines are used across the modules - time is managed effectively

Appendix 2.5. Example Coordinator Pack



16 November 2017

Mrs Lara Jazzar
Al Amanah College
2 Winspear Ave
BANKSTOWN NSW 2200

Dear Mrs Jazzar

Life Education looks forward to visiting the children of Al Amanah College. Your visit has been scheduled for:

DATES: Thu 5/4/18 to Tue 10/4/18
COST PER CHILD: \$10.00 per student.
LOCATION: Mobile classroom at your school.

The cost per child includes the following:

- > A 'pre-visit' with the School Coordinator to help ensure the program is tailored to the particular needs of the school;
- > A 60-90 minute session (dependent upon the module) with each of the participating classes, facilitated by the Life Education Educator;
- > A student workbook (for some modules this will be online) and sticker for each child;
- > A teacher manual (for some modules this is online), as well as access to lesson plans, online activities and support resources;
- > Take home parent information as well as access to free educational apps;

The purpose of this Coordinator Pack is to provide you with all the information that you will need to know, both in terms of administration as well as for your teachers. We ask that you please circulate this information to other staff members to help prepare and connect the class teachers with support resources.

Also attached is a checklist template which we trust will make it easier for you in your role as our Life Education Coordinator at the school.

If you have any further questions please do not hesitate to contact us on (02) 9673 3222 or 1300 HAROLD (ie 1300 427653).

Regards

Chris Planer – Program Operations Manager
Joan Cassar – Senior Service Delivery/Logistics Manager

LIFE EDUCATION NSW

A Registered Charity ABN 59 053 737 045 • PO Box 789, St Marys NSW 1790
Telephone: (02) 9673 3222 • Fax: (02) 9673 4215 • Email: nsw@lifeeducation.org.au • Website: www.lifeeducation.org.au
Patron: His Excellency General the Honourable David Hurley AC, DSC (RETD) Governor of NSW

ABOUT OUR VISITS



Al Amanah College

DATE: Thu 5/4/18 to Tue 10/4/18

Your educators are:

Cathy Logue (m) 0404 090 577 CLogue@lifeeducation.org.au

Pre-Visit

Your educator(s) will contact you prior to your visit to discuss the timetable and the specific requirements of your students. During this process, the following things will normally be discussed:

- > Location of the Mobile Learning Centre (if different to what has been advised);
- > Timetable needs of the school factoring in key activities such as sport, scripture and library;
- > Needs of participating classes including any special requirements relating to composite or special needs classes;
- > Whether the school will be facilitating the purchase of Harold fundraising products;

To accommodate the preference of the School Coordinator, the pre-visit discussion can take the form of a telephone call. Educators also have an email facility if this method of communication is preferred.

The Visit

Following is some information to assist you in organising your Life Education visit.

Permission Note, etc

A permission note template is enclosed. However please note that Life Education NSW does not require this so it is up to the school whether this or any other type of permission note is used.

Timetable

Enclosed is a timetable that we ask you to complete and return to either the Life Education NSW office or directly to your Educator.

Location of Mobile Learning Centre

Please ensure you have provided us with a map of where the classroom is to be placed in your school grounds. The mobile classroom must be placed on a level (preferably concrete) surface and close to a double power supply (ie two separate power points). Please also advise us if your gates are locked and if so the times they are locked and unlocked.

Duration of Programs

K-2 programs are one hour and primary programs are 1.5 hours. If applicable for your school, Early childhood programs are 40 to 45 minutes duration.

ABOUT OUR VISITS



When your class visit the Mobile Learning Centre...

A school staff member, preferably the class teacher, must be present during the program and will be asked to participate! Please ensure classes arrive promptly, ideally around 5 minutes before the scheduled start, as it takes a few minutes for children to settle.

Resource Materials

At the conclusion of the session teachers will be given a quantity of workbooks for later distribution to their students, together with a manual for themselves (unless these resources are in online format for the particular module). Stickers and a one-pager for parents outlining what has been covered in the session will also be handed out at this time.

Note that at the end of the session the teacher will be given a flyer containing the login details, which they will need in order to access the online support materials. These login details are also contained in this pack.

Harold Products

Life Education NSW is a not for profit, registered charity that relies heavily on the raising of funds within the community to assist in the delivery of the service. The average cost of delivering our program to each student is around \$23. Given that the current cost to the parents/schools is \$10, there is a gap that we strive to cover each year through fundraising.

The sale of Harold merchandise to the children is one way that Life Education NSW raise some funds to offset the cost of our programs. We do encourage each school to allow students to purchase these products, but ultimately this is a decision for the school to make.

A price list is also enclosed for distribution to parents with permission notes or inclusion in your school newsletter. Life Education NSW is also open to discussing other ways of selling this merchandise in order to make it as easy as possible for teachers, students and our Educators.

Post Visit

Teachers are encouraged to continue the learning by using the teacher resources distributed at the end of the session, together with the student workbooks. There is also a large amount of supporting material available on the Life Education Australia website.

Feedback for Life Education NSW

We would love to hear from you after the sessions have been delivered. We encourage teachers to complete the evaluation and we will also send a survey to School Coordinators seeking feedback on the overall service we have provided including the booking process, scheduling, the visit and also the post-visit materials provided.

Additional benefits for Life Education schools

Life Education NSW will also provide ongoing support and information throughout the year. One way that we will be doing this is to provide 'snippets' for your school newsletter which will also contain links to relevant articles and materials on our website.



DO YOUR TEACHERS AND PARENTS NEED MORE INFORMATION TO KEEP THE WHOLE FAMILY SAFE ONLINE?

Life Education in collaboration with Intel Security has launched a new cybersafety vodcast series for parents. <http://www.lifeeducation.org.au/cybersafety-for-parents-vodcasts>

PROCESS

TEACHERS REGISTRATION



Your coordinator checklist and timeline

Pre-visit

- Review and explore modules (4-6 weeks out)
- Lock-in basic timetable
- Assess class needs and agree on outcomes (complete a Needs Analysis per class or by Stage)
- Confirm merchandise requirements
- Distribute permission notes if required
- Advise you parents of the visit date and modules via your school newsletter
- Herald Harold around the school – get kids and the school community excited and ready.

During visit

- A parent information session can top & tail your student lessons to provide parents with information on what was learned, general insight to topics covered in the Life Education session and parent resources
- Talk to your Educator about being involved in your school assembly or another special event you might have on that week
- Put a shout out on your e-board

Post-visit

- Teachers complete the program evaluation
- Access online resources and 10+ hour's extension activities including lesson plans all linked to syllabus
- Let your parents know about the Parent Hub resources and connect them with videos, articles and module aligned Apps to continue learning at home.
- School / Service Co-ordinator to complete Service Delivery Survey and feedback on all aspects of our service
- Snippets newsletter provides your school and its families with news and content to keep your school community healthy and in contact until we see you next year!
- Rebook early to secure your visit for 2018!



DID YOU KNOW?

To be included in future versions: Join our Facebook Community (closed group) to get information, help and share tips and feedback with us and other Life Education partner schools and teacher advocates

PROGRAM OUTLINE



Below is a brief outline of the programs available to the children for participation:

My Body Matters NEW!	Early Stage 1 (K) - Healthy food choices, importance of physical activity, safety
Harold's Friend Ship NEW!	Early & Stage 1 (K - Yr 1) - Explores how to build friendships and care for others, feelings and emotions, safe and unsafe situations and early warning signs, safe places and people to turn to for help.
Ready, Steady, Go NEW!	Stage 1 (Yr 1) - Body workings, safe use and storage of medicines, peer pressure and coping strategies, safety, decision making
Growing Good Friends NEW!	Stage 1 (Yr 2) Unsafe behaviours, situations and environments, healthy food choices.
Safety Rules NEW!	Stage 1 (Yrs 1-2) - Problem solving, personal safety, seeking help, how to care for others and behaviours that maintain friendships
All Systems Go	Stages 1 & 2 (Yrs 2-3) Function of body systems, peer pressure, second hand smoking, and safety with medicines.
ibCyberwise	Stage 2 (Yrs 3 & 4) - Explores cyber safety through animation, vox pops of children, relevant scenarios, discussion & problem solving.
Mind Your Medicine	Stage 2 (Yr 4) - Safe and unsafe situations, medicines and consequence of misuse, peer influence and friendship, positive communication
On the Case	Stage 3 (Yr 5) - Short and long term effects of smoking, effects of passive smoking, laws, peer influence, and refusal skills.
Think Twice	Stage 3 (Yr 6) - Consequences of alcohol use and misuse, stay safe situations and refusal skills, laws controlling purchase and use.
Relate Respect Connect NEW!	Stage 3 (Yrs 5 & 6) - Teaches the knowledge, skills and attitudes that children need to develop and maintain safe and respectful relationships both on and offline. Including effective communication skills, development of empathy and conflict resolution skills
Decisions NEW!	Stage 3 & 4 (Yrs 5, 6, 7 & 8) - This module offers choice of content on legal drugs or legal and illegal drugs. Students explore the decision-making process and improve decision-making skills by looking at choices, consequences, responsibility, facts and influences

Teachers of composite classes will choose the program which best suits the needs of their children.

THE COST IS \$10.00 PER STUDENT. Date / /

I give permission for _____ Class _____

to attend the Life Education program and enclose \$ _____

Signature _____ [Parent/Guardian]

HAROLD MERCHANDISE



Dear Parents,

Life Education NSW is a not for profit organisation that relies on the support of the community to assist us in reaching our fundraising goals. Every Harold product purchased helps us visit more children in NSW.

The sale of Harold merchandise to the children whilst the program is visiting each school supports our overall fundraising activities and helps cover the gap between the cost of delivery and what parents and schools pay for our program. These products help to remind children about the messages delivered to them during their Life Education session and have either a picture of Harold or the Life Education logo on them.

The educator will provide the opportunity for children to purchase these products during the school visit. Please provide the correct money in an envelope with the item written on the face of the envelope along with your child's name and class. This allows the educator to process orders efficiently and accurately. Orders will be returned by the conclusion of the visit. You can also check out our **NEW** product range online by visiting www.lifeeducation.org.au/shop



Name: _____ Class: _____

Product Description	Price Incl. GST	QTY	Product Description	Price Incl. GST	QTY
Tattoo	\$0.50		Large Harold Soft Toy	\$15.00	
Harold Post-it-note	\$1.50		Harold Stationery Set	Check availability with Educator	
Harold Hand Ball	\$3.00		Harold Keyring	Check availability with Educator	
Small Harold Soft Toy	\$8.00				
Total Owing	\$		Total Owing	\$	

NB Harold Products are subject to availability Life Education NSW thanks you for your support.



Help support Life Education

* I would like to donate \$ _____ to Life Education NSW. Gifts of \$2.00 or over are tax deductible.

Name: _____ Phone (optional): _____

Address: _____ Suburb: _____

Postcode: _____ Email (optional): _____

Child's Class: _____

Visit Life Education at www.lifeeducation.org.au

MAP OF SCHOOL GROUNDS – IF HAVING A VAN VISIT
MUST BE PROVIDED EACH YEAR FOR SYDNEY METRO SCHOOLS ONLY

School Name: _____ ES KEY NO. _____

Region: _____

After hours contact person and phone number: _____

Times the school gates are locked: _____ And unlocked: _____

To ensure the van is put in the correct place, please draw below, a map of the school grounds CLEARLY indicating where you would like the van to be placed and the name of the street the driver will enter the school from. The van must be placed on a level, preferably concrete, surface and near a power supply (two separate circuits). If you already have a map of the school that is of A4 size, please fax/post it to us with the return of your booking form. We will then provide a copy of this map to the tow truck driver to assist them in delivering the van.

A large, empty rectangular box with a black border, intended for the user to draw a map of the school grounds. The box is currently blank.

CLASSES ATTENDING



Life Education NSW

Bankstown

Cathy Logue (m) 0404 090 577 CLogue@lifeeducation.org.au

Fax number (02) 9673 4215

Daily class schedule

School: **Al Amanah College**

Other schools hosted: _____

School enrolment: _____ No of classes: _____

Principal: _____ Coordinator: _____

Please enter Class name, teachers name and class numbers in the session and date box. Please note that the Kinder to Year 2 programs are one hour and the Year 3 to 6 are 1.5 hours duration. It would be a great help if the children wore name tags please.

Day/Date										
Session 1 ____ to ____										
Session 2 ____ to ____										
Session 3 ____ to ____										

FAQ'S:

Q How will I know what programs to select?

A Your educator will be able to assist with module selection, including the key content areas, stage groups they are aimed at and how they align to the NSW curriculum

Q What time will the mobile learning centre be arriving?

A Generally between 1-2 days prior to the start date

Q What is the duration of each session?

A Stage One = 1 hour, Stages 2 & 3 = 1.5 hours

Q Where can I find the online teacher resources?

A You can visit <http://www.lifeeducation.org.au/teachers/item/160-teacher-resources>

Q Who do I contact if I have questions about the life education visit to our school?

A For questions relating to module selection and timetabling please contact your educator. For information on van location, bookings for next year or anything else, please contact Life Education NSW on **(02) 9673 3222**

Did you know...

- > That many of our mobile learning centres are transported by volunteers
- > We see over 280,000 students across the state
- > We have launched 6 brand new modules since July 2016
- > Parent sessions may be conducted by our Educators during your visit.



DID YOU KNOW?

In regional areas our mobile learning centres are moved by the steam of many volunteers, service clubs and generous councils who believe that every child, no matter how remote, should have access to a program of positive, preventative health and drug education.

PROCESS

TEACHERS REGISTRATION

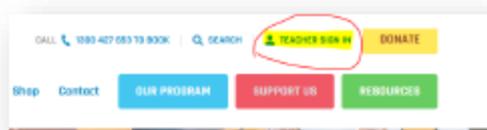


Access to our Online Resources

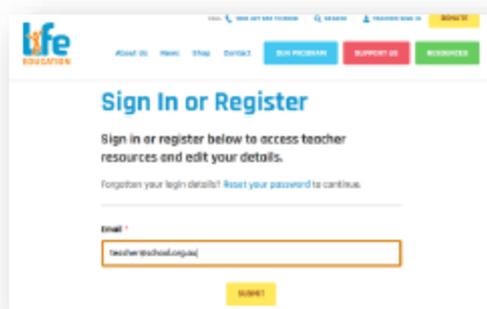
To maximise the learning content from your recent Life Education session you will find a range of resources to use in the classroom with your students on or website

Go to www.lifeeducation.org.au

Step 1: Click on **Teacher sign In**, found on top toolbar



Step 2: Enter your email address and details.



Step 3: Pickup activation email sent to your inbox.

Step 4: Create your own Password.

Once you have created your login go to the main page, click on **Resources** then **Our Modules**. You should now be able to view all modules.

PROCESS

TEACHERS REGISTRATION



Interactive Whiteboard Lessons

These lessons are designed to be used with SMART notebook version 10 or higher or Promethean ActiveInspire. Schools need this software if they wish to run any of the IWB lessons on the website. Information about how to download trial versions of this software can be found on the Teacher Resource page.

Once an IWB lesson has been downloaded teachers can adapt and modify it to suit the needs of their students and then enrich the learning further with the other lessons outlined in our print based resources.

Teachers are encouraged to give feedback via our online survey.

We hope you enjoy using the resources

Appendix 2.6. Life Education: Class Needs Analysis

Decisions (Designed for Years 5 -7- Insert your year levels)

School: _____ Teacher: _____ Grade: _____

Please note, this module can cover content about illegal drugs, please indicate if you would like that content included in the session.

Yes/No (circle one)

The following selection table shows the content descriptions for the Life Education module you have chosen. If you would like to concentrate on specific content please complete this form and return it to the Life Education educator prior to the session in the Mobile Learning Centre. The educator will always plan sessions according to specific needs expressed by the class room teacher. Thank you for taking the time to plan ahead for the Life Education visit.

Life Education Content Descriptions					
Awareness	Recognises their responsibility for the health and safety of themselves and others				
Knowledge	Identify the physical, social, financial and legal consequences of legal/illegal drug use	Identifies factors that influence their health and behaviour e.g. media, advertising, family, friends, laws	Describes laws governing the advertising, sale and use of a variety of legal/illegal drugs	Government and community strategies that educate and inform people how to maintain healthy and safe lifestyles e.g. campaigns, product labelling	Identify services or support networks where people/young people can seek help
✓ Tick knowledge areas for specific focus					
Strategies/Skills	Identifies and demonstrates strategies to deal with unsafe situations and social dilemmas				

Further information:

Please list any other special considerations your class may require in order for the Life Education session to maximise students' understandings and learning e.g. ESL and/ or Special Educational Needs

Please return via fax/email: (insert number)

Appendix 2.7. Alignment of Life Education drug and alcohol modules to best practice approaches for substance use prevention in middle school-aged children

Characteristics of effective interventions	Description of characteristics of effective interventions	Evidence of LE overall program, or drug and alcohol module alignment
THEORY		
<p>Intervention based on developmental process theories**</p>	<p>“The effective models are based on social development and cognitive behavioural risk process theories.”¹</p> <p>“Support was found for theories that included: cognitive behaviour development theories (whereby early age behaviour and attitudes to alcohol use predict later behaviours); social development theories (that explain how the development of substance misuse are predicted by perceived behaviours of peer and adult role models, poor family management, and low school engagement); self-regulation theories (explaining the influence of behavioural dysregulation indicated by conduct and attention problems) and community environments (alcohol availability).”¹</p> <p>[NB. Evidence from Sax report: Based on majority of studies across the 2 reviews = 13-15 years of age]</p>	<p>There is no evidence available via the desktop review that report the specific theory that the LE program was developed. However, a review of the theoretical and design principles underpinning the Life Education Program was conducted by Erebus International in 2017. The report commissioned by Life Education reports the theory underpinning the Life Education Program as a whole is “based on the assumption that if students are provided with knowledge and helped to develop predisposing attributes that enhance their capacity to make safer and healthier choices, they will then exercise these choices, leading to positive behaviours that lead to improved health and wellbeing”. Further the report stated that the Life Education Program as a whole was highly consistent with a number of theories including Bandura’s social learning theory, Bronfenbrenner’s ecological framework for human development, Ajzen’s Theory of Planned Behaviour, Reasoned Action Theory.</p> <p>On the Case</p> <p>LE OTC manual reports following key learning outcomes assessed to align with social influence theories of prevention</p> <ul style="list-style-type: none"> • Identifies the personal, social and environmental consequences associated with smoking • Identifies strategies to address public influences and pressures to smoke • Practices strategies to address public influences and pressures to smoke • Identifies strategies to reduce harms related to smoking e.g. second-hand smoking • Practices strategies to reduce harms related to smoking e.g. second-hand smoking <p>LE OTC manual reports following key learning outcomes which were assessed as aligning with social competence theories of prevention</p> <ul style="list-style-type: none"> • Identifies the personal, social and environmental consequences associated with smoking

		<ul style="list-style-type: none"> • Identifies strategies to address public influences and pressures to smoke • Practices strategies to address public influences and pressures to smoke • Identifies strategies to reduce harms related to smoking e.g. second-hand smoking • Practices strategies to reduce harms related to smoking e.g. second-hand smoking <p>Think Twice LE TT manual reports following key learning outcomes assessed to align with social influence theories of prevention</p> <ul style="list-style-type: none"> • Identifies that alcohol is a legal drug which can affect all body systems resulting in short and long term consequences • Identifies the harmful effects that drinking alcohol can have on the community • Identifies and demonstrates strategies to reduce alcohol related harm <p>LE TT manual reports following key learning outcomes which were assessed as aligning with social competence theories of prevention</p> <ul style="list-style-type: none"> • Identifies and demonstrates strategies to reduce alcohol related harm <p>Decisions LE Decisions manual reports following key learning outcomes assessed to align with social influence theories of prevention</p> <ul style="list-style-type: none"> • Identify the physical, social, financial and legal consequences of legal/illegal drug use • Identify factors that influence their health and behaviour e.g. media, advertising, family, friends, laws • Identifies and demonstrates strategies to deal with unsafe situations and social dilemmas <p>LE Decisions manual reports following key learning outcomes which were assessed as aligning with social competence theories of prevention</p> <ul style="list-style-type: none"> • Identify the physical, social, financial and legal consequences of legal/illegal drug use • Identify factors that influence their health and behaviour e.g. media, advertising, family, friends, laws - Identifies and demonstrates strategies to deal with unsafe situations and social dilemmas
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CONTENT		
Normative education*	<p>“Effective intervention components include normative education.”¹</p> <p>No definition provided in the SAX report or the cited reference. Griffin et al 2010 defines normative education as “content and activities to correct inaccurate perceptions regarding the high prevalence of substance use.” The bases of this recommendation is that young people tend to overestimate the prevalence of substance which can make it seem to be normative behaviour. By educating youth about actual rates of substance use, reducing the perceptions that substance use is social acceptable.²</p> <p>[NB. Evidence from Sax report: Botvin and Cuijper – age not clear as Botvin is a summary of literature and Cuijper is a review that only mentions Year for some of the included studies (these show Year 6 to 10)]</p>	‘On the Case’, ‘Think Twice’ and ‘Decisions’ Educator manuals list prevalence of drug and alcohol use of adolescents as learning outcomes.
Peer resistance skills training*	<p>“Effective intervention components include peer resistance skills training.”¹</p> <p>[NB. Evidence from Sax report: Based on majority of studies across the 2 reviews = 13-15 years of age]</p>	‘On the Case’, ‘Think Twice’ and ‘Decisions’ Educator manuals include activities to provide children with peer resistance skills training (Educator manuals).
Reducing positive expectancies*	<p>“Effective intervention components include reducing positive expectancies.”¹</p> <p>No definition provided in the SAX report or the cited reference. If an individual develops beliefs that substance use is associated with subjectively positive outcomes, it is suggested they are more likely to try the substance.³</p> <p>[NB. Evidence from Sax report: Based on majority of studies across the 2 reviews = 13-15 years of age]</p>	‘On the Case’, ‘Think Twice’ and ‘Decisions’ Educator manuals include discussion on why people choose to smoke/drink/use drugs and negative effects of drug use (Educator manuals).
Involve parenting components/programs*	<p>“Effective intervention components include parenting components.”¹</p> <p>[NB. Evidence from Sax report: Based on majority of studies across the 2 reviews = 13-15 years of age]</p>	There is no evidence that any LE program content is delivered face-to-face to parents. However, as part of program implementation schools are encouraged to conduct school parent information sessions to reiterate verbally to parents what their child will learn/has learnt during their LE sessions. In addition, parents are provided take home flyers and handouts at the end of the LE session (either in person during parent information sessions or sent home with their child). These resources provide

		information related to the topics covered during the student LE session as well as links to a range of audio visual and additional print based information available on the online 'Parent Hub' (parent section of LE website) so they have an active role in the program and can support further conversations with their kids and learning in the home environment.
Multicomponent are not superior to single-component programs**	<p>"Multicomponent programs (e.g. whole of school programs) are not superior to single-component programs, due partly to the simpler implementation challenges for the latter."¹</p> <p>Durlak et al 2011, describes multicomponent programs as those which involve classroom teaching as well as either or both a parent and school-wide component.⁴</p> <p>[NB. Evidence from Sax report: Both reviews include a range of ages from elementary school (K-5), middle school (6-8), high school (9-12)]</p>	<p>The LE program is a curriculum-based program which includes classroom activities for teachers to implement with students.</p> <p>LE reports schools are encouraged to conduct parent information sessions, and parents are provided LE information/resource.</p>
Universal programs that teach social-emotional learning skills, self-control, problem solving, healthy behaviours*	<p>"For primary school students, universal programs that teach social-emotional learning skills, self-control and problem solving and healthy behaviours are the most beneficial."¹</p> <p>The SAX report did not provide a definition for social-emotional learning skills. The Collaborative for Academic, Social, and Emotional learning defines social-emotional learning as "the process through which children and adults understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions."⁵</p>	<p>Whilst not reported by LE, the suggested delivery of LE modules to all classes and Year groups in a school, is consistent with definitions of a universal prevention program</p> <p>On the Case</p> <p>LE OTC manual reports following key learning outcomes which were assessed as aligning with social-emotional learning skills, self-control, problem solving and healthy behaviours</p> <ul style="list-style-type: none"> • Recognises that people are responsible for the decisions that they make in relation to smoking and the effect it has on others • Identifies that nicotine and chemicals in cigarette smoke can affect the whole body • Identifies the personal, social and environmental consequences associated with smoking • Identifies the laws governing the advertising, sale and use of tobacco products • Identifies strategies to address public influences and pressures to smoke • Practices strategies to address public influences and pressures to smoke

		<ul style="list-style-type: none"> • Identifies strategies to reduce harms related to smoking e.g. second-hand smoking • Practices strategies to reduce harms related to smoking e.g. second-hand smoking <p>Think Twice LE TT manual reports following key learning outcomes which were assessed as aligning with social-emotional learning skills, self-control, problem solving and healthy behaviours</p> <ul style="list-style-type: none"> • Recognises that people are responsible for the decisions that they make in relation to alcohol and the effect that it has on others • Identifies that alcohol is a legal drug which can affect all body systems resulting in short and long term consequences • Identifies the harmful effects that drinking alcohol can have on the community • Identifies people, services and products that advise, educate and inform people of the effects of drinking alcohol • Identifies the laws governing the advertising, sale and use of alcohol related products • Identifies and demonstrates strategies to reduce alcohol related harm <p>Decisions LE Decisions manual reports following key learning outcomes which were assessed as aligning with social-emotional learning skills, self-control, problem solving and healthy behaviours</p> <ul style="list-style-type: none"> • Recognise the responsibility for the health and safety of themselves and others • Identify the physical, social, financial and legal consequences of legal/illegal drug use • Identify factors that influence their health and behaviour e.g. media, advertising, family, friends, laws • Describes the laws governing the advertising, sale and use of a variety of legal and illegal drugs • Identify government and community strategies that educate and inform people about how to maintain healthy and safe lifestyles e.g. campaigns, product labelling • Identifies and demonstrates strategies to deal with unsafe situations and social dilemmas
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SEL skills, social norm strategies*	<p>“In early secondary school (early adolescence) SEL skills, social norm strategies and parent programs are effective.”¹</p> <p>Onrust et al 2016, SEL skills defined as “social emotional learning or mental health programmes, targeting (a) social skills, (b) problem solving or decision making skills, (c) self-control, (d) self-esteem, and (e) coping with stress and anxiety.”⁶ “The objective of this social norm component is to correct misperceptions of peers' substance use and acceptance-levels”. “Parent programs” – in the context of whether parents were involved in the program or not – no more details of what this involvement looked like.⁶</p>	<p>‘On the Case’, ‘Think Twice’ and ‘Decisions’ Educator manuals list learning outcomes describing social-emotional skills, self-control, problem solving and healthy behaviours</p> <p>‘On the Case’, ‘Think Twice’ and ‘Decisions’ Educator manuals list prevalence of drug and alcohol use of adolescents as learning outcomes</p>
Not focused on specific substances***	<p>“Teaching students about specific substances in primary school can be counter-productive for substance misuse prevention, as this may attract higher risk students to explore these substances.”¹</p>	<p>On the Case’, ‘Think Twice’ and ‘Decisions’ Educator manuals list learning outcomes related to tobacco, alcohol, illegal drugs</p>
DELIVERY/MODE		
Use computer and on-line delivery**	<p>“Computers or the internet offer an effective platform for school-based alcohol and other drug prevention programs with outcomes evident from 6 months to 34 months.”¹</p> <p>[NB. Evidence from Sax report: Based on majority of studies across the 2 reviews = 13-15 years of age]</p>	<p>‘On the Case’, ‘Think Twice’ and ‘Decisions’ Educator manuals list digital tools to support student learning including digital interactive activities, animations, and videos during LE visit, interactive digital games (mobile apps)</p>
Interactive education*	<p>“Effective intervention components include interactive education.”¹</p> <p>[NB. Evidence from Sax report: Based on majority of studies across the 2 reviews = 13-15 years of age]</p>	<p>‘On the Case’, ‘Think Twice’ and ‘Decisions’ Educator manuals list digital and hands on interactive activities to use with students</p>
Standardisation of implementation**	<p>“Effective intervention components include the standardisation of implementation.”¹</p> <p>[NB. Evidence from Sax report: Based on majority of studies across the 2 reviews = 13-15 years of age]</p>	<p>‘On the Case’, ‘Think Twice’, and ‘Decisions’ Educator manuals are available</p> <p>No other information available via the desktop review regarding standards for the implementation of Life Education program in NSW.</p>
Conform to quality design features****	<p>“Social-emotional learning interventions have measurably higher effects where they avoid implementation problems and conforms to quality design features described by the acronym SAFE: S – sequenced (clear and coordinated program logic); A – active (active learning components used); F – focused (at least one component develops personal or social skills); E – Explicit (to SEL skills rather than general skills or positive development).”¹</p>	<p>No evidence was available via the desktop review regarding whether the LE program in NSW aligns to quality design features.</p>

	[NB. Evidence from Sax report: Both reviews include a range of ages from elementary school (K-5), middle school (6-8), high school (9-12)]	
Delivered by classroom teachers***	<p>“Programs delivered by classroom teachers have more consistent effects compared to those delivered by non-school personnel.”¹</p> <p>[NB. Evidence from Sax report: Both reviews include a range of ages from elementary school (K-5), middle school (6-8), high school (9-12)]</p>	‘On the Case’, ‘Think Twice’ and ‘Decisions’ modules are delivered by LE Educators. LE request a teacher is present during the LE session. LE provides teachers with activities to implement with their students pre and post the LE visit
DOSE		
Use longer programs and booster sessions**	<p>“Longer programs were the most effective at between 4 and 12 lessons. The three programs that included booster lessons all showed significant effects.”¹</p> <p>[NB. Evidence from Sax report: Based on majority of studies across the 2 reviews = 13-15 years of age]</p>	Different LE modules are designed to be delivered to students once per year for each schooling year (preschool to secondary school)

*Aligned, **partially aligned, ***not aligned, ****no evidence regarding alignment; NB. LE=Life Education. 1. Toumbourou J, Rowland B, Renner H, Hobbs T. Healthy lifestyle choices in children: an Evidence Check rapid review brokered by the Sax Institute for the NSW Ministry of Health 2016; 2. Griffin, K. W. and G. J. Botvin (2010). "Evidence-based interventions for preventing substance use disorders in adolescents." Child and adolescent psychiatric clinics of North America 19(3): 505-526; 3. Jones, S. C. and C. S. Gordon (2017). "A systematic review of children's alcohol-related knowledge, attitudes and expectancies." Preventive Medicine 105: 19-31; Durlak, J. A., et al. (2011). "The impact of enhancing students' social and emotional learning: a meta-analysis of school-based universal interventions." Child Dev 82(1): 405-432; 5. Collaborative for Academic, S., and Emotional Learning (CASEL), . "What is SEL." Retrieved 11 April, 2019, from <https://casel.org/what-is-sel/>.; 6. Onrust, S. A., et al. (2016). "School-based programmes to reduce and prevent substance use in different age groups: What works for whom? Systematic review and meta-regression analysis." Clin Psychol Rev 44: 45-59.

Chapter 3

Appendix 3.1. Student survey outcome measures

			Baseline survey		Immediate follow-up	6 month follow-up	
Outcome measures	Survey Item	Response options	Int	Cont	Int	Int	Cont
Primary outcome							
Intentions to use tobacco, alcohol or other drug use in the future	Which of the following best describes you?	I will never smoke cigarettes / I probably will smoke cigarettes / I probably won't smoke cigarettes / Don't know	X	X	X	X	X
	Which of the following best describes you?	I will never drink alcohol / probably will drink alcohol / I probably won't drink alcohol / I don't know	X	X	X	X	X
	Which of the following best describes you?	I will never use an illegal drug / I probably will use an illegal drug / I probably won't use an illegal drug / I don't know	X	X	X	X	X
Secondary outcomes							
Awareness on issues related to tobacco, alcohol or other drugs	What percentage (%) of 12 to 17 year old Australians have NEVER smoked a cigarette	About 50% (half) have never smoked a cigarette / Between 50% (half) and 75% (three-quarters) have never smoked a cigarette / More than 75% (three-quarters) have never smoked a cigarette / Don't know	X	X	X	X	X
	What percentage of students aged 12–17 years have never tried an alcoholic drink?	About 50% (half) have never tried an alcoholic drink / Between 50% (half) and 75% (three-quarters) have never tried an alcoholic drink / More than 75% (three-quarters) have never tried and alcoholic drink / Don't know	X	X	X	X	X
	What percentage of students aged 12–17 years have never tried an illegal drug?	About 50% (half) have never tried an illegal drug / Between 50% (half) and 75% (three-quarters) have never tried an illegal drug / More than 75% (three-quarters) have never tried an illegal drug / Don't know	X	X	X	X	X
Knowledge on issues related to tobacco, alcohol or other drugs	The drug inside cigarettes is called tobacco	True / False / Don't know	X	X	X	X	X
	Smoking is addictive	True / False / Don't know	X	X	X	X	X
	Tobacco smoke contains more than 7,000 chemicals	True / False / Don't know	X	X	X	X	X

			Baseline survey		Immediate follow-up	6 month follow-up	
Outcome measures	Survey Item	Response options	Int	Cont	Int	Int	Cont
	Cigarette smoking is a major cause of cancer of the throat	True / False / Don't know	X	X	X	X	X
	Smoking cigarettes slows down the heart	True / False / Don't know	X	X	X	X	X
	Alcohol is a stimulant that speeds up the way our body works	True / False / Don't know	X	X	X	X	X
	The liver can process two standard alcoholic drinks every hour	True / False / Don't know	X	X	X	X	X
	It is illegal to sell alcohol to persons under the age of 18	True / False / Don't know	X	X	X	X	X
	Alcohol is a drug	True / False / Don't know	X	X	X	X	X
	Physical effects of drinking alcohol include brain damage and memory loss	True / False / Don't know	X	X	X	X	X
	Caffeine is a drug	True / False / Don't know	X	X	X	X	X
	If a drug is illegal it means it is against the law	True / False / Don't know	X	X	X	X	X
	Illegal drugs are dangerous and affect people differently	True / False / Don't know	X	X	X	X	X
	Cocaine and heroin are illegal drugs	True / False / Don't know	X	X	X	X	X
Confidence to avoid using tobacco, alcohol or other drugs	How hard or easy would it be for you to refuse or say "no" to a friend who offered you a cigarette to smoke?	Very hard / Hard / Easy / Very easy / Don't know	X	X	X	X	X
	How hard or easy would it be for you to refuse or say "no" to a friend who offered you alcohol?	Very hard / Hard / Easy / Very easy / Don't know	X	X	X	X	X
	How hard or easy would it be for you to refuse or say "no" to a friend who offered you an illegal drug?	Very hard / Hard / Easy / Very easy / Don't know	X	X	X	X	X
Exploratory outcomes							
Risk factors – Conduct problems	I get very angry and often lose my temper	No, never / Yes, some of the time / Yes, most of the time / Yes, all of the time	X	X		X	X
	I usually do as I am told	No, never / Yes, some of the time / Yes, most of the time / Yes, all of the time	X	X		X	X
	I fight a lot. I can make other people do what I want	No, never / Yes, some of the time / Yes, most of the time / Yes, all of the time	X	X		X	X

			Baseline survey		Immediate follow-up	6 month follow-up	
Outcome measures	Survey Item	Response options	Int	Cont	Int	Int	Cont
	I am often accused of lying or cheating	No, never / Yes, some of the time / Yes, most of the time / Yes, all of the time	X	X		X	X
	I take things that are not mine from home, school, or elsewhere	No, never / Yes, some of the time / Yes, most of the time / Yes, all of the time	X	X		X	X
Risk factors – Hyperactivity problems	I am restless; I cannot stay still for long	No, never / Yes, some of the time / Yes, most of the time / Yes, all of the time	X	X		X	X
	I am constantly fidgeting or squirming	No, never / Yes, some of the time / Yes, most of the time / Yes, all of the time	X	X		X	X
	I am easily distracted, I find it difficult to concentrate	No, never / Yes, some of the time / Yes, most of the time / Yes, all of the time	X	X		X	X
	I think before I do things	No, never / Yes, some of the time / Yes, most of the time / Yes, all of the time	X	X		X	X
	I finish the work I am doing, my attention is good	No, never / Yes, some of the time / Yes, most of the time / Yes, all of the time	X	X		X	X
Risk factors – Peer problems	I would rather be alone than with people my own age	No, never / Yes, some of the time / Yes, most of the time / Yes, all of the time	X	X		X	X
	I have one good friend or more	No, never / Yes, some of the time / Yes, most of the time / Yes, all of the time	X	X		X	X
	Other people my own age generally like me	No, never / Yes, some of the time / Yes, most of the time / Yes, all of the time	X	X		X	X
	Other children or young people pick on me or bully me	No, never / Yes, some of the time / Yes, most of the time / Yes, all of the time	X	X		X	X
	I get along better with adults than people my own age	No, never / Yes, some of the time / Yes, most of the time / Yes, all of the time	X	X		X	X
Risk factors – student has someone in their life who smokes tobacco or consumes alcohol	Do any of the following people you know smoke cigarettes? (tick all that apply)						
	Your mother, father or carer	No / Yes	X	X		X	X
	Your brother or sister	No / Yes	X	X		X	X
	Your friends	No / Yes	X	X		X	X
	None of these people	No / Yes	X	X		X	X
	Do any of the following people you know drink alcohol? (tick all that apply)						
	Your mother, father or carer	No / Yes	X	X		X	X
Your brother or sister	No / Yes	X	X		X	X	

			Baseline survey		Immediate follow-up	6 month follow-up	
Outcome measures	Survey Item	Response options	Int	Cont	Int	Int	Cont
	Your friends	No / Yes	X	X		X	X
	None of these people	No / Yes	X	X		X	X
Protective factors – Family, school, community connection	At home, at school or in the community there is an adult who is interested in my school work	No, never / Yes, some of the time / Yes, most of the time / Yes, all of the time	X	X		X	X
	At home, at school or in the community there is an adult who believes that I will be a success	No, never / Yes, some of the time / Yes, most of the time / Yes, all of the time	X	X		X	X
	At home, at school or in the community there is an adult who wants me to do my best	No, never / Yes, some of the time / Yes, most of the time / Yes, all of the time	X	X		X	X
	At home, at school or in the community there is an adult who listens to me when I have something to say	No, never / Yes, some of the time / Yes, most of the time / Yes, all of the time	X	X		X	X
	At school or the community there is an adult who really cares about me	No, never / Yes, some of the time / Yes, most of the time / Yes, all of the time	X	X		X	X
Protective factors – Self-esteem	I can work out my problems	No, never / Yes, some of the time / Yes, most of the time / Yes, all of the time	X	X		X	X
	I can do most things if I try	No, never / Yes, some of the time / Yes, most of the time / Yes, all of the time	X	X		X	X
	There are many things that I do well	No, never / Yes, some of the time / Yes, most of the time / Yes, all of the time	X	X		X	X
Protective factors – Empathy	When I need help, I find someone to talk to	No, never / Yes, some of the time / Yes, most of the time / Yes, all of the time	X	X		X	X
	I know where to go for help when I have a problem	No, never / Yes, some of the time / Yes, most of the time / Yes, all of the time	X	X		X	X
	I try to work out problems by talking about them	No, never / Yes, some of the time / Yes, most of the time / Yes, all of the time	X	X		X	X
Protective factors – Pro-social peers	My friends try and do what is right	No, never / Yes, some of the time / Yes, most of the time / Yes, all of the time	X	X		X	X
	My friends do well in school	No, never / Yes, some of the time / Yes, most of the time / Yes, all of the time	X	X		X	X
Protective factors – Schoolwork	How well do you do in your schoolwork?	I'm one of the best students / I do better than most students / I do about the same as others / I don't do as well as most others	X	X		X	X
Contextual outcomes							

			Baseline survey		Immediate follow-up	6 month follow-up	
Outcome measures	Survey Item	Response options	Int	Cont	Int	Int	Cont
Previous exposure to drug and alcohol lessons at school in 2018	Have you had any lessons or parts of lessons at school that were about smoking cigarettes this year (2018)?	No, not even part of a lesson / Yes, more than one lesson / Yes, one lesson / Yes, part of a lesson / Don't know/not sure	X	X		X	X
	Have you had any lessons or parts of lessons at school that were about drinking alcohol this year (2018)?	No, not even part of a lesson / Yes, more than one lesson / Yes, one lesson / Yes, part of a lesson / Don't know/not sure	X	X		X	X
	Have you had any lessons or parts of lessons at school that were about illegal drugs this year (2018)?	No, not even part of a lesson / Yes, more than one lesson / Yes, one lesson / Yes, part of a lesson / Don't know/not sure	X	X		X	X
Previously attended a Life Education session	Have you attended a Life Education lesson before?	Yes / No / Don't know/not sure	X	X			X
Impact measures							
LE student resources used before	Which of the following Life Education resources have you used before:						
	Website	No / Yes	X	X		X	
	Mobile App	No / Yes	X	X		X	
	Activity with parent	No / Yes	X	X		X	
	Lesson with teacher	No / Yes	X	X		X	
	Student workbook in class	No / Yes	X	X		X	
	None	No / Yes	X	X		X	
Change in awareness, knowledge, skills and confidence to avoid tobacco, alcohol or other drugs after attending LE	Do you now know more or less about the harms of smoking than before attending today's Life Education session?	More / I didn't learn anything new / Less / The same / Don't know			X		
	How much did the Life Education session help you to: Understand the effect that smoking has on the body?	I learnt a lot / I learnt some things / I learnt a little / I learnt nothing new / I don't know			X		
	How much did the Life Education session help you to: Understand why people choose not to smoke?	I learnt a lot / I learnt some things / I learnt a little / I learnt nothing new / I don't know			X		
	How much did the Life Education session help you to: Think about how smoking affects you or people you know?	I learnt a lot / I learnt some things / I learnt a little / I learnt nothing new / I don't know			X		

Outcome measures	Survey Item	Response options	Baseline survey		Immediate follow-up	6 month follow-up	
			Int	Cont	Int	Int	Cont
	How much did the Life Education session help you to: Know more about the laws relating to smoking in Australia?	I learnt a lot / I learnt some things / I learnt a little / I learnt nothing new / I don't know			X		
	Do you know more about the effects of alcohol than you did before this session?	Yes / No / Don't know			X		
	How much did the Life Education session help you to: Understand how alcohol affects the body?	I learnt a lot / I learnt some things / I learnt a little / I learnt nothing new / I don't know			X		
	How much did the Life Education session help you to: Be more aware of the risks of drinking alcohol?	I learnt a lot / I learnt some things / I learnt a little / I learnt nothing new / I don't know			X		
	How much did the Life Education session help you to: Think about how alcohol affects you or people you know?	I learnt a lot / I learnt some things / I learnt a little / I learnt nothing new / I don't know			X		
	How much did the Life Education session help you to: Learn about alcohol use laws in Australia?	I learnt a lot / I learnt some things / I learnt a little / I learnt nothing new / I don't know			X		
	Do you know more about the effects of illegal drug use than you did before this Life education session?	Yes / No / Don't know			X		
	How much did the Life Education session help you to: Understand how illegal drugs affect the body?	I learnt a lot / I learnt some things / I learnt a little / I learnt nothing new / I don't know			X		
	How much did the Life Education session help you to: Be more aware of the risks of illegal drug use?	I learnt a lot / I learnt some things / I learnt a little / I learnt nothing new / I don't know			X		
	How much did the Life Education session help you to: Think about how illegal drug use affects you or people you know?	I learnt a lot / I learnt some things / I learnt a little / I learnt nothing new / I don't know			X		
	How much did the Life Education session help you to: Learn about illegal drug use laws in Australia?	I learnt a lot / I learnt some things / I learnt a little / I learnt nothing new / I don't know			X		
	How much did the Life Education session help you to: Work out things you can do to avoid second hand smoke?	I learnt a lot / I learnt some things / I learnt a little / I learnt nothing new / I don't know			X		

			Baseline survey		Immediate follow-up	6 month follow-up	
Outcome measures	Survey Item	Response options	Int	Cont	Int	Int	Cont
	How much did the Life Education session help you to: Know how to knock back (or refuse) a cigarette if others try to offer you one?	I learnt a lot / I learnt some things / I learnt a little / I learnt nothing new / I don't know			X		
	How much did the Life Education session help you to: Feel confident to make a decision to not smoke?	I learnt a lot / I learnt some things / I learnt a little / I learnt nothing new / I don't know			X		
	How much did the Life Education session help you to: Know how to knock back (or refuse) an offer of alcohol if others offer it to you?	I learnt a lot / I learnt some things / I learnt a little / I learnt nothing new / I don't know			X		
	How much did the Life Education session help you to: Feel confident to make your own decisions about drinking alcohol?	I learnt a lot / I learnt some things / I learnt a little / I learnt nothing new / I don't know			X		
	How much did the Life Education session help you to: Know how to knock back (or refuse) an offer of drugs if others offer it to you?	I learnt a lot / I learnt some things / I learnt a little / I learnt nothing new / I don't know			X		
	How much did the Life Education session help you to: Feel confident to make your own decisions about using illegal drugs?	I learnt a lot / I learnt some things / I learnt a little / I learnt nothing new / I don't know			X		
Change in intentions to use tobacco, alcohol or other drug use in the future based on the information received during Life Education session	Did the information you learned from Life Education make you less likely or more likely to smoke in the future?	Less likely / More likely / The same/no change / Don't know				X	
	Did the information you learned from Life Education make less or more likely to drink alcohol in the future?	Less likely / More likely / The same/no change / Don't know				X	
	Did the information you learned from Life Education make you less or more likely to use illegal drugs in the future?	Less likely / More likely / The same/no change / Don't know				X	
Intentions to discuss what they've learnt during Life Education session with someone at home	Do you intend to discuss what you learned today in Life Education about smoking with someone at home (e.g. parent, sibling)?	Yes / No / Don't know			X		
	Do you intend to discuss what you learned today in Life Education about alcohol with someone at home (e.g. parent, sibling)?	Yes / No / Don't know			X		

			Baseline survey		Immediate follow-up	6 month follow-up	
Outcome measures	Survey Item	Response options	Int	Cont	Int	Int	Cont
Discussed what they've learnt during Life Education session with someone at home	Did you discuss what you learned in Life Education about smoking with someone at home (e.g. parent, sibling)? (tick one box only)	Yes / No / Don't know				X	
	Did you discuss what you learned in Life Education about smoking with someone at home (e.g. parent, sibling)? (tick one box only)	Yes / No / Don't know				X	

Appendix 3.2. Reasons students didn't complete surveys

Reasons students didn't complete the baseline survey

- Being absent from school the day of data collection (n=53)
- Refused (n=10)
- Classroom teacher decided it was not appropriate for students to participate e.g. in support class, did not pay for Life Education/attend Life Education session (n=7)

Reasons students didn't complete the immediate follow-up survey

- Changed module and opted to not complete immediate follow-up survey (n=37)
- Being absent from school the day of data collection (n=50)
- Mistakenly weren't offered as didn't complete baseline (n=26)
- Refused (n=4)
- Classroom teacher decided it was not appropriate for students to participate e.g. in support class, did not pay for Life Education/attend Life Education session (n=24)
- Student missed due to time constraints (n=1)

Reasons students didn't complete the 6 month follow-up survey

- Being absent from school the day of data collection (n=93)
- Classroom teacher decided it was not appropriate for students to participate e.g. in support class, did not pay for Life Education/attend Life Education session (n=1)
- Refused (n=3)

Appendix 3.3. Unadjusted primary and secondary student outcomes at immediate and 6 month follow-up^a

Outcome	Int immediate follow-up		Int 6 month follow-up		Cont 6 month follow-up		Int immediate follow-up vs. Cont baseline	Int vs. Cont at 6 month follow-up
	N	n (%)	N	n (%)	N	n (%)	OR (95% CI), ^b p value ^c	
Primary outcome (Intentions)								
Cigarette smoking (never)	358	308 (86)	363	304 (84)	386	313 (81)	1.41 (0.87, 2.26), p=0.16	1.02 (0.57, 1.85), p=0.93
Alcohol consumption (never)	276	75 (27)	278	71 (26)	383	65 (17)	1.43 (0.69, 2.97), p=0.33	1.25 (0.69, 2.26), p=0.45
Other drug use (never)	170	156 (92)	176	163 (93)	382	352 (92)	0.83 (0.34, 2.03), p=0.67	1.03 (0.36, 2.98), p=0.95
Secondary outcomes								
Cigarette smoking								
Awareness (correct response)	355	156 (44)	359	91 (25)	386	67 (17)	3.94 (2.17, 7.17), p<0.001	2.32 (1.30, 4.12), p=0.005
Knowledge (score out of 5), mean (SD)	358	2.76 (0.90)	365	2.55 (0.93)	387	2.14 (0.77)	MD 0.57 (0.38, 0.75), p<0.001	MD 0.50 (0.34, 0.65), p<0.001
Confidence to avoid (confident)	357	320 (90)	363	330 (91)	386	344 (89)	1.69 (0.92, 3.09), p=0.09	1.14 (0.58, 2.25), p=0.69
Alcohol consumption								
Awareness (correct response)	273	70 (26)	282	83 (29)	382	114 (30)	0.82 (0.56, 1.20), p=0.30	1.02 (0.62, 1.67), p=0.94
Knowledge (score out of 5), mean (SD)	277	3.27 (1.05)	284	2.74 (1.09)	387	2.32 (1.06)	MD 0.71 (0.41, 1.00), p<0.001	MD 0.35 (0.14, 0.56), p=0.001
Confidence to avoid (confident)	276	228 (83)	281	237 (84)	384	295 (77)	1.68 (0.99, 2.83), p=0.05	1.22 (0.67, 2.21), p=0.51
Other drug use								
Awareness (correct response)	176	69 (39)	175	57 (33)	379	114 (30)	1.59 (0.94, 2.71), p=0.08	1.46 (0.80, 2.66), p=0.21
Knowledge (score out of 5), mean (SD)	178	4.36 (1.09)	176	4.22 (1.02)	387	3.92 (1.18)	MD 0.64 (0.32, 0.95), p<0.001	MD 0.42 (0.19, 0.66), p<0.001
Confidence to avoid (confident)	174	163 (94)	176	164 (93)	383	355 (93)	1.60 (0.62, 4.11] (p=0.32)	1.39 (0.51, 3.79), p=0.51

^aOutput reported as n (%) unless stated otherwise; ^bOutput reported as OR (95%CI) unless stated otherwise; ^cBolded results p<0.01; NB. Int=intervention, Cont=control, OR=Odds ratio; CI=Confidence intervals; SD=Standard deviation; MD=mean difference.

Appendix 3.4. Sensitivity analyses of the primary outcome (Intentions) (n=3)

Outcome	Int immediate follow-up		Int 6 month follow-up		Cont 6 month follow-up		Int immediate follow-up vs. Cont baseline OR (95% CI), p value ^a	Int vs. Cont at 6 month follow-up
	N	n (%)	N	n (%)	N	n (%)		
Cohort (completed both baseline and 6 month follow-up surveys)								
Cigarette smoking (never)	315	270 (86)	314	265 (84)	356	284 (80)	1.10 (0.64, 1.89), p=0.72	1.21 (0.62, 2.33), p=0.57
Alcohol consumption (never)	238	61 (26)	234	53 (23)	353	62 (18)	0.83 (0.42, 1.64), p=0.59	1.21 (0.63, 2.33), p=0.56
Other drug use (never)	146	132 (90)	150	139 (93)	352	324 (92)	0.37 (0.14, 0.99), p=0.05	1.60 (0.50, 5.04), p=0.42
Additionally adjusting for delivery of drug and alcohol related curricula during class in 2018								
Cigarette smoking (never)	358	308 (86)	363	304 (84)	386	313 (81)	1.09 (0.65, 1.84), p=0.73	1.08 (0.58, 2.01), p=0.82
Alcohol consumption (never)	276	75 (27)	278	71 (26)	383	65 (17)	1.01 (0.47, 2.16), p=0.98	1.22 (0.64, 2.29), p=0.54
Other drug use (never)	170	156 (92)	176	163 (93)	382	352 (92)	0.55 (0.22, 1.37), p=0.19	1.18 (0.38, 3.60), p=0.77
Includes all drug and alcohol modules								
Cigarette smoking (never)	480	402 (84)	554	457 (82)	386	313 (81)	1.15 (0.72, 1.81), p=0.56	1.06 (0.61, 1.84), p=0.84
Alcohol consumption (never)	478	138 (29)	549	160 (29)	383	65 (17)	1.12 (0.57, 2.22), p=0.74	1.36 (0.80, 2.32), p=0.25
Other drug use (never)	469	433 (92)	553	501 (91)	382	352 (92)	0.95 (0.45, 2.00), p=0.90	1.32 (0.63, 2.79), p=0.46

^aBolded results p<0.01; NB. Int=intervention, Cont=control

Appendix 3.5. Per protocol analysis of the primary outcome (Intentions) – participation dosage

Outcome	Int immediate follow-up		Int 6 month follow-up		Cont 6 month follow-up		Int immediate follow-up vs. Cont baseline OR (95% CI), p value ^a	Int vs. Cont at 6 month follow-up
	N	n (%)	N	n (%)	N	n (%)		
High participation dosage ≥4 years								
Cigarette smoking (never)	140	118 (84)	138	115 (83)	386	313 (81)	1.11 (0.55, 2.22), p=0.77	1.06 (0.45, 2.51), p=0.88
Alcohol consumption (never)	102	12 (12)	99	18 (18)	383	65 (17)	0.61 (0.17, 2.16), p=0.43	1.94 (0.71, 5.32), p=0.18
Other drug use (never)	68	65 (96)	64	63 (98)	382	352 (92)	1.15 (0.27, 5.00), p=0.84	3.42 (0.27, 43.78), p=0.32
High participation dosage ≥4 drug and alcohol modules								
Cigarette smoking (never)	173	146 (84)	174	147 (84)	386	313 (81)	1.08 (0.56, 2.10), p=0.81	1.16 (0.52, 2.57), p=0.71
Alcohol consumption (never)	105	15 (14)	99	19 (19)	383	65 (17)	0.58 (0.16, 2.09), p=0.38	1.82 (0.67, 4.92), p=0.23
Other drug use (never)	64	61 (95)	60	59 (98)	382	352 (92)	1.03 (0.22, 4.84), p=0.96	2.28 (0.15, 34.54), p=0.53
High participation dosage ≥4 LE modules								
Cigarette smoking (never)	231	198 (86)	231	199 (86)	386	313 (81)	1.22 (0.66, 2.24), p=0.52	1.17 (0.56, 2.45), p=0.67
Alcohol consumption (never)	126	20 (16)	119	23 (19)	383	65 (17)	0.65 (0.24, 1.78), p=0.39	1.65 (0.67, 4.08), p=0.26
Other drug use (never)	85	81 (95)	81	79 (98)	382	352 (92)	0.99 (0.27, 3.69), p=0.99	3.07 (0.47, 20.18), p=0.23

^aBolded results p<0.01; NB. Int=intervention, Cont=control, LE=Life Education

Chapter 4

Appendix 4.1. Calculations of cost measures

Cost measure	Calculation
Total mean cost per school	Calculated by dividing the total direct cost of delivering LE in NSW in the 2017/2018 financial year by the number of schools receiving LE in NSW in the 2017/2018 financial year.
Weighted average cost per school	Calculated by dividing the total direct cost of delivering LE in 2017/18 financial year by the total number of LE sessions delivered at all schools and multiplying by the number of sessions at each school. It was assumed that all sessions and all modules have equal weighting in terms of cost.
Mean cost per student attending LE for any module in any Year group	Calculated by dividing the weighted average cost per school by the total number of students who attended LE in each school.
Mean cost per session delivered for any module in any Year group	Calculated by dividing the weighted average cost per school by the total number of LE sessions delivered per school.
Mean cost per school for Year 5 LE sessions delivered for any module	Calculated by multiplying the mean cost per session delivered for any module in any Year group by the number of Year 5 student sessions delivered per school. Only schools with a Year 5 LE session were included in the denominator (irrespective of which module was delivered).
Mean cost per school to deliver any drug and alcohol modules to Year 5 students	Calculated by multiplying the mean cost per school for Year 5 LE sessions for any module by the proportion of all Year 5 modules that were drug and alcohol modules.
Mean cost per school to deliver 'On the Case', 'Think Twice' and 'Decisions' to Year 5 students	Calculated by multiplying the mean cost per school for Year 5 LE sessions for any module by the number of all Year 5 modules that were 'On the Case', 'Think Twice' and 'Decisions'.

LE=Life Education

Appendix 4.2. Costs to deliver the Life Education Program in NSW in the 2017/18 financial year

Costs	Value
Wages	
LE Educators: 34 FTE	\$2,685,000
Admin – Educator support: 4 FTE	\$416,000
Admin – Fundraising/marketing: 2 FTE	\$204,000
Admin – maintenance/towing: 2 FTE	\$172,000
Admin – school marketing: 1 FTE	\$102,000
Admin – Finance: 3 FTE	\$301,000
Admin – Other: 3 FTE	\$433,000
Equipment/materials	
Capital Expenditure (includes tow truck \$80k)	\$233,000
Maintenance vans	\$121,000
Maintenance trucks and bus	\$111,000
Program/resource costs	\$31,000
Storage and delivery	\$72,000
Workbook supplies	\$132,000
Program promotion	\$23,000
Travel costs	
Educator vehicle costs	\$175,000
Educator travel reimbursement:	\$85,000
Educator Accommodation costs:	\$44,000
Administrative costs	-
TOTAL	\$485,000

NB. FTE=Full time equivalent

Chapter 5

Appendix 5.1. Observational audit tool

School ID Number _____

**Life Education NSW
 Observation Tool
 (Version 1 – 07.08.18)**

Visit Details

Q1. Date and time of Visit: _____

Q2. School name: _____

Q3. Address: _____

Q4. Phone number: _____

Q5. Contact Person on arrival: _____

Q6. LE NSW Educator Name: _____

Q7. School Teacher Name: _____

Q8. Module observed:

Decisions

On The Case

Think Twice

Q9. Additional Notes: _____

GENERAL OVERVIEW QUESTIONS

Q10. Number of children and staff present during Life Education session	Children:				
	School staff:				
	LE staff:				
Q11. Start time					
Q12. Finish time					
Q13. Were teachers provided with workbooks, stickers and parent information at the conclusion of the session?					
Q14. Did teachers distribute resources to students at the conclusion of the session? (workbooks, stickers, and take home parent information)					
Q15. Did the Educator appear confident in delivering the Life Education Session? Please rate their level of confidence on the Likert scale.	not at all confident	not very confident	neutral	confident	very confident
	1	2	3	4	5

LESSON OBSERVATION

LESSON SEQUENCE	ACTIVITIES/GAMES/RESOURCES USED and OPPORTUNITIES FOR LEARNING
INTRODUCTION (Orientation)	
BODY (Topic contents)	
CONCLUSION (Summary of content covered)	

Appendix 5.2. 'On the Case' - alignment of observed activities with learning outcomes from relevant Life Education manual by module

Module component	Activity from Life Education manual observed	Other activities observed*
Introduction	0	1
Outcome 1: Recognises that people are responsible for the decisions that they make in relation to smoking and the effect that it has on others	2	1
Outcome 2: Identifies that nicotine and chemicals in cigarette smoke can affect the whole body	1	2
Outcome 3: Identifies the personal, social and environmental consequences associated with smoking	2	0
Outcome 4: Identifies the laws governing the advertising, sale and use of tobacco products	1	0
Outcome 5: Identifies strategies to address public influences and pressures to smoke	1	0
Outcome 6: Practices strategies to address public influences and pressures to smoke	0	0
Outcome 7: Identifies strategies to reduce harms related to smoking e.g. second-hand smoking	1	0
Outcome 8: Practices strategies to reduce harms related to smoking e.g. second-hand smoking	0	0
Conclusion	0	1
TOTAL (% of all activities)	8 (62%)	5 (38%)
TOTAL activities aligned to learning outcomes (% of all learning outcomes aligned lesson activities)	8 (73%)	3 (27%)

*Includes activities that have been developed by Educators and other relevant existing activities provided outside of the On the Case module manual

Appendix 5.3. ‘Think Twice’ - alignment of observed activities with learning outcomes from relevant Life Education manual by module

Module component	Activity from Life Education manual observed		Other activities observed*	
	School 1	School 2	School 1	School 2
Introduction	0	0	3	1
Outcome 2: Identifies that alcohol is a legal drug which can affect all body systems resulting in short and long term consequences	3	3	3	3
Outcome 3: Identifies the harmful effects that drinking alcohol can have on the community	2	3	0	1
Outcome 4: Identifies services that advise, educate and inform people of the facts about drinking alcohol	0	1	1	2
Outcome 5: Identifies the laws governing the advertising, sale and use of alcohol product	2	0	0	0
Outcome 6: Identifies and demonstrates strategies to reduce alcohol related harms	1	0	1	1
Conclusion	0	0	1	1
TOTAL (% of all activities)	8 (47%)	7 (44%)	9 (53%)	9 (56%)
TOTAL activities aligned to learning outcomes (% of all learning outcomes aligned lesson activities)	8 (62%)	7 (50%)	5 (38%)	7 (50%)

*Includes activities that have been developed by Educators and other relevant existing activities provided outside of the Think Twice module manual. NOTE: Outcome 1: Student Awareness “Recognises that people are responsible for the decisions that they make in relation to alcohol and the effect that it has on others” is not included in Table 5 as there are no specific examples of learning related to this outcome and it is expected this outcome is covered throughout the Life Education session.

Appendix 5.4. 'Decisions' - alignment of observed activities with learning outcomes from relevant Life Education manual by module

Module component	Activity from Life Education manual observed		Other activities observed*	
	School 1	School 2	School 1	School 2
Introduction	0	0	1	3
Outcome 1: Recognise the responsibility for the health and safety of themselves and others	5	0	0	0
Outcome 2: Identify the physical, social, financial and legal consequences of legal/illegal drug use	8	3	0	0
Outcome 3: Identify factors that influence their health and behaviour e.g. media, advertising, family, friends, laws	5	1	1	3
Outcome 4: Describes the laws governing the advertising, sale and use of a variety of legal and illegal drugs	3	2	0	0
Outcome 5: Identify government and community strategies that educate and inform people about how to maintain healthy and safe lifestyles e.g. campaigns, product labelling	0	0	0	0
Outcome 6: Identify services or support networks where people/young people can seek help	0	0	0	0
Outcome 7: Identifies and demonstrates strategies to deal with unsafe situations and social dilemmas	0	1	0	1
Conclusion	0	0	1	1
TOTAL (% of all activities)	21 (88%)	7 (47%)	3 (12%)	8 (53%)
TOTAL activities aligned to learning outcomes (% of all learning outcomes aligned lesson activities)	21 (95%)	7 (64%)	1 (5%)	4 (36%)

*Includes activities that have been developed by Educators and other relevant existing activities provided outside of the Decisions module manual

Appendix 5.5. Observed activities consistent with teaching methods from Life Education Educator manuals

Teaching method	OTC	TT	Decisions		Overall % of sessions	
	S1	S1	S2	S1	S2	
Participation in games/puzzles	Y	Y	Y	Y	Y	100%
Reading resources during the session						0%
Interactive activities on screen	Y		Y	Y	Y	80%
Educational videos	Y	Y		Y	Y	80%
Group activities	Y	Y		Y	Y	80%
Using workbook to answer questions						0%
Forming scenarios using their imaginations				Y	Y	40%
Use of role play		Y				20%
Individual answering of questions	Y	Y	Y	Y	Y	100%
Whole class discussions	Y	Y		Y	Y	80%

Chapter 6

Appendix 6.1. Teacher survey

Life Education NSW Evaluation Teacher Survey

Document Version 2; dated 13/06/2018

1. Today's date _____ 2. School name _____

3. How many years have you been teaching for? _____

4. How many years have you been teaching at your current school? _____

5. What is your level of accreditation based on the Australian Professional Standard for Teachers?

- Graduate teacher Proficient teacher Highly accomplished/lead teacher
 Other _____

The next questions ask about the process of selecting and booking a Life Education Session

6. Who was responsible for booking the Life Education Session for your school in 2018?

- I was
 Someone else. Please specify position _____

7. Has your school booked a Life Education Session before?

- Yes – please continue
 No – please go to Question 9
 Unsure – please go to Question 9

8. How does your school decide what Year groups receive Life Education?

- Annual booking with set modules for each Year group
 At the start of each year depending on the needs of each Year group
 Other _____

9. In selecting the Life Education individual modules 'Decisions', 'Think Twice' or 'On the case' for your Year 5 students in 2018, which of the following did you or other decision makers in your school consider (tick all that apply):

- Age appropriateness of Life Education modules for your Year 5 class
 Alignment with PDHPE K-6 syllabus
 Tobacco, alcohol or other drug issues within your community
 Particular needs of your Year 5 students
 Recommendations from Life Education Educator
 Did not book 'Decisions', 'Think Twice' or 'On the case' Life Education modules in 2018

- Other _____
- Don't know

10. How did your school hear about Life Education?

- Life Education educator contacted our school
- From a school staff member who previously worked at a school that booked Life Education
- Life Education website
- Media outlet e.g. TV, radio, online news, social media (i.e. facebook, Instagram)
- At a local event/activity
- Other _____
- Unsure

11. How was your 2018 Life Education Session booked?

- Life Education educator contacted our school to prompt booking
- Our school contacted our allocated Life Education Educator
- Via the Life Education website
- Phoned/emailed Life Education directly
- Unsure, did not book the Life Education session

12. In 2018, how was the delivery of the Life Education Sessions for Year 5 students funded in your school? (tick all that apply)

- Parents/guardians contributions School contributes funds
- School community fundraising Other _____

The next questions about the Life Education modules that were delivered to your class in 2018

On the Case module

13. Was the 'On the Case' (focused on smoking) delivered to your Year 5 class in 2018?

- Yes – please continue No – please go to Question 16

14. Did your Life Education Educator consult with you regarding the appropriateness of the 'On the Case' module content for your Year 5 class?

- Yes No

15. Did your school request any changes to the content of the 'On the Case' module delivered to your Year 5 class?

- Yes, please describe _____
- No

Think Twice module

16. Was the 'Think Twice' (focused on alcohol) delivered to your Year 5 class in 2018?

- Yes – please continue No – please go to Question 19

17. Did your Life Education Educator consult with you regarding the appropriateness of the 'Think Twice' module content for your Year 5 class?

- Yes No

18. Did your school request any changes to the content of the 'Think Twice' module delivered to your Year 5 class?

- Yes, please describe _____
 No

Decisions module

19. Was the 'Decisions' module (focused on legal and illegal drugs) delivered to your Year 5 class in 2018?

- Yes – please continue No – please go to Question 23

20. Was the content in the 'Decisions' module regarding illegal drugs delivered as part of the session?

- Yes
 No, unsure why this content was not delivered
 No, our school requested the content regarding illegal drugs not be delivered

21. Did your Life Education Educator consult with you regarding the appropriateness of the 'Decisions' module content for your Year 5 class?

- Yes No

22. Did your school request any changes to the content of the 'Decisions' module delivered to your Year 5 class?

- Yes, please describe _____
 No

23. Which of the following other Life Education modules were delivered to your Year 5 class in 2018 (tick all that apply)?

- cCyberwise (focused on cybersafety) Relate Respect Connect (focused on relationships)
 None

24. Which of the following Life Education modules did you observe being delivered (i.e. were you present during the module delivery) to your Year 5 class in 2018 (tick all that apply)?

- On the Case Think Twice Decisions
 None, if not why _____ i.e. RFF time)

The next questions are about the Life Education Resources

For Question 25 part (a) and (b) please tick all that apply

25a. In 2018, which of the following Life Education Resources did your Educator **provide to you**, or **provide you access to**, and **when (i.e. before or after the Life Education visit)**?

b. Of those resources you were provided, **which did you use or access**, and **when (i.e. before or after the Life Education visit)**?

c. How useful did you find each of the Life Education resources?

Resource	Before LE visit		After LE visit		How useful did you find each of the following Life Education resources in 2018?				
	Provided access	Used/ accessed	Provided access	Used/ accessed	Very Useful	Some what Useful	Not Very Useful	Not At All Useful	Unsure
a. Module content descriptions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
b. Life Education website	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
c. Access to teacher portal of website	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
d. Teacher notes for modules	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
e. Teacher lesson plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
f. Teacher manual	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
g. Facebook Community (closed group)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
h. Parent resources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
i. Mobile app	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
j. Latest news	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
k. Student workbook	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
l. Life Education Snippets newsletter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Other resources:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
m. _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
n. _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
o. _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				

26. Do you have any feedback on any of the resources provided? _____

27. Do you have any feedback on other resources that would have been useful for teachers?

The next questions are about the Life Education Program delivered in 2018

28. Please indicate how much you agree or disagree with the following statements in relation to the Life Education Program in 2018

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
a. There is a good selection of Life Education modules to choose from	<input type="checkbox"/>				
b. The face to face mode of Life Education delivery to Year 5 students is effective in engaging students	<input type="checkbox"/>				
c. The content of the Life Education modules is relevant to the curriculum	<input type="checkbox"/>				
d. The Life Education program modules are not age appropriate	<input type="checkbox"/>				
e. The curriculum content that is currently delivered by teachers is sufficient without engaging external agencies to deliver drug education	<input type="checkbox"/>				
f. The Life Education modules were delivered in an engaging way by the educator	<input type="checkbox"/>				
g. The Life Education program is not a good resource to support teachers	<input type="checkbox"/>				
h. Working with the Life Education educator has helped me to include drug education in my own classroom lessons	<input type="checkbox"/>				
i. It is appropriate for parents to pay for delivery of mandated curriculum by Life Education	<input type="checkbox"/>				

j. The teacher support resources do not complement the Life Education session	<input type="checkbox"/>				
k. External agencies should deliver drug education rather than classroom teachers	<input type="checkbox"/>				
l. The Life Education program is needed in our school community	<input type="checkbox"/>				
m. It is appropriate for the school to pay for delivery of mandated curriculum by Life Education	<input type="checkbox"/>				
n. The Life Education content is understood by the students	<input type="checkbox"/>				
o. I believe the Life Education program will make a positive impact on my students future health related decisions	<input type="checkbox"/>				
p. I will recommend that my school re-books the Life Education program in the future	<input type="checkbox"/>				
q. The cost of delivering Life Education to students represents value for money	<input type="checkbox"/>				
r. There is a strong partnership between Life Education and participating schools	<input type="checkbox"/>				
s. The educator did not appear confident in teaching the Life Education modules I observed	<input type="checkbox"/>				

29. Please indicate how effective you think the following teaching methods were during the Life Education session in 2018:

	Very Effective	Effective	Undecided	Ineffective	Very Ineffective	Method not observed
a. Story telling	<input type="checkbox"/>					
b. Digital and interactive tools on screen	<input type="checkbox"/>					
c. Skills practice	<input type="checkbox"/>					
d. Animated videos	<input type="checkbox"/>					
e. Characters (actors)	<input type="checkbox"/>					
f. Use of role play	<input type="checkbox"/>					
g. Group work	<input type="checkbox"/>					

h. Student workbook activities	<input type="checkbox"/>					
i. Class answering questions aloud	<input type="checkbox"/>					
j. Individuals answering questions aloud	<input type="checkbox"/>					
k. Curriculum differentiation (i.e. tailoring of teaching methods to different student learning needs)	<input type="checkbox"/>					
l. Provision of resources to read during the session						
m. Use of puzzles/games						
n. Use of their imagination to form scenarios						

30. Do you have any comments or feedback regarding the teaching methods? _____

31. On which of the following topics have you taught a lesson to your Year 5 class in 2018? (NB. Do not include any Life Education supplementary lessons/activities for this question)

- Cigarette Smoking
 Drinking Alcohol
 Other legal drug use (e.g. medicine, caffeine)
 Illegal drug use (e.g. cannabis, amphetamines)
 None

32. On which of the following topics do you plan to teach your Year 5 class before the end of 2018? (NB. Do not include any Life Education supplementary lessons/activities for this question)

- Cigarette Smoking
 Drinking Alcohol
 Other legal drug use (e.g. medicine, caffeine)
 Illegal drug use (e.g. cannabis, amphetamines)
 None

33. Which of the following topics did you conduct a **Life Education supplementary lesson/activity** on prior to the Life Education session in 2018?

- Cigarette Smoking
 Drinking Alcohol
 Other legal drug use (e.g. medicine, caffeine)
 Illegal drug use (e.g. cannabis, amphetamines)
 None
 Did not receive Life Education supplementary lesson/activity prior to session

34. Which of the following topics did you conduct a **Life Education supplementary lesson/activity** on after the Life Education session in 2018?

- Cigarette Smoking Drinking Alcohol Other legal drug use (e.g. medicine, caffeine)
 Illegal drug use (e.g. cannabis, amphetamines) None
 Did not receive Life Education supplementary lesson/activity to implement following the session

35. Can you estimate approximately how many hours of **Life Education supplementary lessons/activities** were delivered to your Year 5 class following the Life Education Session in 2018?
 _____ hours

36. Please indicate how confident you are teaching drug education topics to your Year 5 class:

	Very confident	Somewhat confident	Neither	Not confident	Not at all confident
a. Cigarette smoking	<input type="checkbox"/>				
b. Drinking alcohol	<input type="checkbox"/>				
c. Other drug use, including illegal drug use	<input type="checkbox"/>				

37. Following the Life Education visit I noticed an increase in student discussion around drug issues in the classroom?

- Yes, please describe _____
 No

38. Which of the following influenced your school's decision to engage Life Education for the delivery of drug education in your school? (tick all that apply)

- Insufficient time within curriculum for teachers to deliver drug education
 Lack of teacher confidence to deliver drug education lessons
 Evidence regarding the effectiveness of the Life Education program
 Reputation of Life Education for delivering drug education
 Alignment of Life Education drug education content with PDHPE curriculum
 Other _____
 Unsure

The next questions ask about parent involvement in Life Education

39. How did you provide parents information prior to the 2018 Life Education visit? (tick all that apply)

- Information in the school newsletter
 Information given to P&C and other community groups
 Notes home to parents
 Via Skoolbag application

- Other _____
- Parents were not informed about the Life Education visit

40. Which Life Education resources or services did you provide to parents in 2018? (tick all that apply)

- The Life Education website
- Take home parent resources
- Life Education mobile apps
- Parent information session by Life Education Educator
- Parents were not provided with any Life Education resources
- Other _____

41. Based on your experience with Life Education in 2018, I would recommend to other schools to book Life Education Sessions

- Yes
- No
- Unsure

42. Do you have any suggestions for how the booking processes, content, delivery and ongoing support for the way Life Education modules are delivered could be improved?

Chapter 7

Appendix 7.1. Educator and Administrator Interview questions

Question	Participant
Demographics	
Can you describe your role with Life Education?	Both
How long have you been with/employed by Life Education?	Both
Which areas of NSW are you responsible for delivering Life Education session?	Educator only
Do you have any education, teaching or training qualifications?	Educator only
Program implementation	
Can you describe how the Life Education program is implemented across NSW?	Both
Could you please describe any factors that enhance or hinder the implementation of Life Education program?	Both
In your opinion, what are the factors that enhance or hinder the implementation of tobacco, alcohol and other drugs programs in schools generally?	Both
In your opinion, is the Life Education drug and alcohol program delivered in a standard way across the state?	Both
Can you describe any planned adaptations and related processes that are implemented during the delivery of Life Education drug and alcohol programs?	Educator only
Are any unplanned adaptations made during delivery of the drug and alcohol modules on the basis of the student population or other factors?	Educator only
Which of the following Life Education modules did you delivery to Year 5 students during 2018? 'On the Case', 'Think Twice', 'Decisions', None of these	Educator only
We understand from Life Education documentation that a class needs analysis is conducted with each class. When you delivered 'On the Case', 'Think Twice', 'Decisions' to Year 5 students in 2018 across NSW, how often was a changed requested?	Educator only
Can you please describe the most common changes that were requested for 'On the Case', 'Think Twice', 'Decisions' for Year 5 students?	Educator only
Are you aware if during program development any consideration was given for culturally or ethnically diverse populations, i.e. Aboriginal people?	Administrator only
Can you please describe the training and support that you received during 2018 from Life Education, including details regarding the frequency and duration?	Both
Can you describe any quality indicators or the processes that you are aware of that are in place to monitor the quality of the delivery and implementation of Life Education across NSW primary schools?	Administrator only
Can you please describe any strategies you are aware of that are implemented within NSW to ensure that all schools have equitable access to the Life Education program?	Administrator only
Can you please describe any strategies that are implemented to increase the uptake and reach of Life Education in NSW primary schools?	Administrator only
Future directions	
Do you think the implementation of school-based tobacco, alcohol and other drug programs could be strengthened in the future?	Both
It has been reported there is an increasing number of available tobacco, alcohol and other drugs programs offered to NSW schools in response to the new curriculum. How do you think Life Education should respond?	Administrator only
Final comments	
That was the last question, was there anything else you wanted to mention regarding the Life Education program before we ended?	Both