Keys4Life Evaluation

Report 1

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INTRODUCTION

Keys4Life is a pre-driver education program delivered in Western Australia (WA) that educates young people about safer road use and allows them to sit their Learner's Permit Theory Test. The Keys4Life program is funded by the Road Safety Commission and administered by the Department of Education (DoE). Keys4Life is recommended for Year 10 to 12 students and their parents/carers but is not compulsory (SDERA, 2020a). In addition to schools, Keys4Life is implemented in non-mainstream education and training services (agencies). Process evaluations of the Keys4Life program were conducted in 2008 by Quantum Consulting for the Office of Road Safety (Office of Road Safety, 2009) and in 2015 by Metrix Consulting (Metrix Consulting, 2016; Office of Road Safety, 2009). Phase 1 and 2 of the current evaluation repeat and extend these evaluations.

The objectives of the first phase of the Keys4Life program evaluation were to:

1. Analyse Keys4Life program engagement data from 2003–2020 for school, teacher, parent/carer and student participation, including analysis by region (metropolitan/regional), education system/organisation (DoE, Catholic Education WA (CEWA), Association of Independent Schools of Western Australia (AISWA), non-school agency) and year.

2. Analyse data from student and parent/carer questionnaires completed at Parent-Student Workshops held from 2017–2019.

3. Analyse data from questionnaires completed by teachers who attended Keys4Life Professional Development (PD) between January 2017 and March 2020.

4. Conduct in-depth interviews with DoE consultants and stakeholders involved in the Keys4Life program.

5. Develop a pre-and-post questionnaire for students who undertake the Keys4Life program to assess changes in beliefs, attitudes and behaviour related to road safety.

PART A: KEYS4LIFE PROGRAM ENGAGEMENT

Part A analysed Keys4Life program engagement data (provided by the DoE) from 2003–2020, including school, non-school agency and student participation in Keys4Life. Data about participation in the Keys4Life PD and Parent-Student Workshops and the number of Learner's Permits issued by Department of Transport was also included. Engagement in the Keys4Life

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program is described in terms of the number and proportion for each variable. Curve fitting methods were used to analyse trends in the number and proportion of school students and schools participating in Keys4Life. Finally, chi-square tests were used to determine differences in Keys4Life program engagement for schools by region (metropolitan/regional) and education system (DoE, CEWA, AISWA).

Overall, the results showed a high level of engagement with the Keys4Life program in WA. In 2020, more than 23,000 pre-drivers participated in Keys4Life across 254 schools and 62 agencies. It was estimated that 73% of the Year 10 cohort in WA and 76% of schools with capacity participated in Keys4Life in 2020. While the number of participating schools and school students has steadily increased since 2003, the proportion of schools with capacity implementing the program plateaued at around 65% from 2011-2019, before increasing to 76% in 2020. Also, a lower proportion of regional schools with capacity implement Keys4Life. In 2020, 83% of metropolitan schools with capacity implemented the program, compared with 65% of regional schools (p<0.001). The proportion of schools hosting Parent-Student Workshops decreased from 50% in 2010 to 27% in 2019. The number of agencies delivering Keys4Life almost doubled in 2020 (compared to 2019) while the number of agency students increased by 12%.

PART B: KEYS4LIFE PARENT-STUDENT WORKSHOP

The Keys4Life Parent-Student Workshop is a voluntary one-hour information session for parents/ carers and students. After each workshop, participants are invited to complete a short questionnaire. The DoE provided a de-identified database of these responses for parents/ carers and students and these were described using frequencies and percentages. Differences in responses by region, education system/organisation and year were examined using chi-square, Fisher's Exact, Mann-Whitney U, Kruskal-Wallis H or Jonckheere-Terpstra tests, as appropriate.

Part B included data from 2798 parents/carers and 2155 students who attended the workshop from 2017–2019. Overall, 93–99% of parents/carers and 95–100% of students responded positively (*'yes'*) to the four questions about confidence with/benefits of supervised driving, safer vehicles, worth of the workshop and awareness of Keys4Life. In addition, 95% of parents/carers and 96% of students responded that they intended to complete more than 50 hours of supervised driving, which is the minimum requirement for licensing. Significantly more parents/carers who attended workshops in regional areas responded *'no/unsure'* to

whether they were more confident about teaching their son/daughter to drive as a result of the workshop (p<0.001). Parents/carers and students in metropolitan areas intended to complete more supervised driving hours than their counterparts in regional areas (p<0.001). Parents/carers also intended to complete more supervised driving hours than students (p<0.001).

PART C: KEYS4LIFE TEACHER PROFESSIONAL DEVELOPMENT

The Keys4Life PD (KFL PD) is a one-day professional learning program that teachers and educators must complete to become registered to deliver the program and administer the Learner's Permit Test. After each PD session, participants were asked to complete a short questionnaire containing five questions evaluating the KFL PD. The DoE provided a de-identified database of the responses and the three quantitative questions were described using frequencies and percentages, while the two open-ended questions were analysed using basic content analysis.

Part C included data from 1046 participants and found that the KFL PD was extremely effective at extending knowledge and understanding and increasing confidence to implement road education strategies, with 98–99% of participants responding positively to these items. KFL PD satisfaction was also extremely high (99%). The open responses from participants were positive. Overall, the findings suggest that the KFL PD does not require any major modifications. However, participants suggested some minor improvements, including (1) the provision of PowerPoint presentations, electronic course resources, infographics/videos and supplementary information to participants on a USB in a format that is compatible with Mac and PC; (2) suggestions surrounding the structure of the KFL PD and time spent on each component and (3) a *Behind the Wheel Journal* app that students could complete on android or Apple devices.

PART D: STAKEHOLDER AND DOE CONSULTANT INTERVIEWS

Part D comprised a qualitative study using semi-structured phone interviews to collect information from DoE consultants and stakeholders about Keys4Life. The role of the DoE consultants is to train and engage teachers and educators to implement Keys4Life and deliver Parent-Student Workshops. The program also has close links with several road safety stakeholders in WA. Discussion topics focused on the participant's role, relationships and satisfaction with DoE and the Keys4Life program, positives of the program, barriers, and areas

for improvement. Qualitative thematic data analysis was undertaken, with the data coded and grouped into themes.

Both consultants and stakeholders were extremely positive about the Keys4Life program, including its value, principles and content. They also praised the Keys4Life resources and the communication and relationships with the DoE. Stakeholders were happy with their role in the program. Participants reported some challenges or barriers in the Keys4Life program, most of which had a particular impact in regional areas. The identified barriers included (1) lack of cultural and regional specific content in the Keys4Life resources, (2) qualification requirements for administering the Learner's Permit Test, (3) COVID-19, (4) decreasing numbers of Parent-Student Workshops and (5) long travel distances for consultants to visit regional towns and communities. Suggested improvements to the program included (1) culturally appropriate resources, (2) refresher training for teachers, (3) delivery of stakeholder presentations through video or online and (4) alternative modes of delivery for Parent-Student Workshops.

PART E: DEVELOPMENT OF PRE-AND-POST QUESTIONNAIRE

Part E involved developing and pilot testing a pre-and-post questionnaire for assessing changes in knowledge, attitudes, and risk perception among students who undertake the Keys4Life program. A brief review of the literature identified existing questionnaires/scales suitable for use. A scale of risk perception (Ivers et al., 2009) and a scale of driving attitudes (Glendon, McNally, Jarvis, Chalmers, & Salisbury, 2014) were selected for inclusion in the questionnaire. Demographic questions were also added, as well as 11 questions addressing road safety areas that are a focus of the Keys4Life program but not covered by the two scales. A convenience sample of young people was recruited to complete the online questionnaire twice, at an interval of approximately three weeks. Cronbach's alpha values were calculated to assess the internal consistency of the scales or items, and intraclass correlation coefficients (ICCs) were calculated to assess test–retest reliability. Kappa values were calculated for two of the items.

Twenty-four participants answered the first questionnaire, and nine of these answered the second questionnaire (37.5%). Seven of the nine completed all of the second questionnaire. Both overall scales had good internal consistency (α=0.74 and 0.86), as did nine of the 10 subscales (α=0.82–0.94). The *'joyriding'* subscale had a lower (poorer) alpha value of 0.62. Both overall scales had excellent test–retest reliability with ICCs of 0.87 and 0.89, as did five of the 10 subscales (ICC=0.81–0.96). One subscale was considered *'good'* with an ICC of 0.73 and two were fair with ICCs of 0.55 and 0.59. Two subscales had *'poor'* test–retest reliability,

being *'joyriding'* (ICC=0.37) and *'risk of crashes'* (ICC=0.27). Removal of three of the 11 additional questions was recommended due to poor test–retest reliability.

CONCLUSION AND RECOMMENDATIONS

Overall, this evaluation confirmed the findings of the two previous process evaluations that the Keys4Life program performs well in terms of engagement and participant satisfaction. The development and pilot testing of a pre-and-post questionnaire as part of this project will enable the collection of valuable new information on the actual impact of Keys4Life lessons on students' risk perception and road safety attitudes in Phase 2.

The following are recommendations from Parts A–E of the evaluation:

1. Investigate the barriers to implementation of Keys4Life for regional and AISWA schools.

2. Investigate reasons for the increased implementation of Keys4Life by non-school agencies in 2020 and market the program to relevant agencies that have never delivered or ceased delivering the program.

3. Explore alternative methods of delivering Parent-Student Workshops to reach more parents/carers, including online workshops held at a specific time, webinars that can be watched at any time, a podcast of the workshop, or content delivery in a written format (electronic or paper copies).

4. Investigate whether parents/carers from regional areas have less confidence surrounding teaching their child to drive than metropolitan parents/carers and examine whether Parent-Student Workshop content could be adapted to suit the needs of regional parents/carers.

5. Consider providing the Keys4Life PD PowerPoint presentations, electronic course resources, infographics/videos and supplementary information to KFL PD participants on a USB, in a format compatible with Mac and PC.

6. Review the structure of the Keys4Life PD and time spent on each component.

7. Investigate the possibility of developing a *Behind the Wheel Journal* app that students could complete on android or Apple devices.

8. Engage with DoE consultants and agency staff to seek solutions that ensure that agencies can still implement Keys4Life following recent changes in qualification requirements for administering the Learner's Permit Test.

9. Develop videos of stakeholder presentations that can be played at the KFL PD in metropolitan and regional areas and/or allow stakeholders to attend and present at the sessions remotely (online).

1 INTRODUCTION

1.1 Keys4Life program

Keys4Life is a pre-driver education program delivered in Western Australia (WA) that educates young people about safer road use and allows them to sit their Learner's Permit Theory Test. The Keys4Life program is funded by the Road Safety Commission and administered by the Department of Education (DoE) In January 2019, the School Drug Education and Road Aware (SDERA) program including Keys4Life, transitioned to the Department of Education from Catholic Education Western Australia. Keys4Life is recommended for school students in Year 10 to 12 and their parents/carers, but is not a compulsory part of the WA curriculum (SDERA, 2020a). In addition to schools, Keys4Life is implemented in non-mainstream education and training services (agencies), including detention centres/prisons/reintegration centres, Aboriginal development and training centres, organisations supporting mental health and disability, TAFE and youth, employment and job training centres (Metrix Consulting, 2016). The Department of Transport authorises registered Keys4Life teachers to administer the Learner's Permit Theory Test. Students who pass are issued with a Keys4Life certificate that can be redeemed for a discounted Learner's Permit at a licensing centre and recognised as an official form of identity when applying for a Learner's Permit. (Department of Education Western Australia 2020). Detailed descriptions of the Keys4Life program are available on the DoE Road Safety and Drug Education Branch website (SDERA, 2020a), in the Keys4Life Teacher Resource (Department of Education Western Australia 2020) and two Keys4Life evaluation reports (Metrix Consulting, 2016; Office of Road Safety, 2009).

The aim of Keys4Life, as described by the Department of Education Western Australia (2020), is for students to develop:

1. Positive road user attitudes and resilient capabilities to help them make safer, informed decisions in traffic and social situations (Gregersen, Nyberg, & Berg, 2003).

2. An understanding of the importance of extensive supervised driving practice and driving safer vehicles (Senserrick et al., 2009).

3. A partnership with parents and the community in the learning to drive process (Saunders & Miller, 2009).

The most recent Keys4Life evaluation reported that 191 schools and 29 agencies in WA implemented Keys4Life in 2015, with 13,738 school students and 557 agency students participating in the program. Nearly half of Year 10 students and almost one-third of all newly licensed drivers in WA (2011–2015) were estimated to have participated in Keys4Life (Metrix Consulting, 2016).

1.2   History of Keys4Life

A detailed history of the Keys4Life program is available in previous evaluation reports (Metrix Consulting, 2016; Office of Road Safety, 2009). Important milestones include:

- 2003: Keys4Life piloted in WA schools

- 2004: Keys4Life officially launched statewide in schools

- 2006: Keys4Life made available to non-school agencies

- 2008: Keys4Life endorsed by the School Curriculum Standards Authority (SCSA) providing school-based students with points towards their graduation

- 2013: Keys4Life Online (multimedia learning resource) introduced for agencies

- 2015: Keys4Life endorsed again by SCSA providing recognition on the WA Certificate of Education for those completing 10 Keys4Life lessons and unit equivalence (5 points) for those completing 40 Keys4Life lessons.

- 2020: DoE implemented a requirement for all Keys4Life teachers/educators to have either a teaching degree or a Certificate in IV Training and Assessment. This was to align the program with national standards, Department of Transport recommendations and to create a consistent and efficient approach to managing the Keys4Life program.

1.3   Content of Keys4Life lessons and evidence-informed practice

The Keys4Life program is most commonly delivered as 10 lessons, with a 40-lesson version and flexible content delivery also available. The lessons broadly cover the WA licensing system, road user responsibilities, road rules, crash statistics, crash impact, decision making, road sharing, reducing risk factors for crashes, supervised driving practice, safer vehicles and first aid (Department of Education Western Australia 2020).

The Keys4Life program is informed by best practice road safety education, and a detailed explanation of the principles behind the program is in the 2015 evaluation report and Keys4Life

Teacher Resource (Metrix Consulting, 2016;Department of Education Western Australia 2020). In summary, best practice road safety education should be evidence-based, delivered by trained teachers, support the licensing system and Safe System Approach, develop social competencies and resilience, and have the potential to positively influence the behaviour of young people in traffic-related situations (Department of Education Western Australia 2020). The program promotes a whole school approach with Keys4Life activities based on *'sound teaching and learning strategies that help young people manage challenging situations and adopt safer behaviours in traffic situations'* (p.4) (Department of Education Western Australia 2020).

1.4 Components of Keys4Life

The Keys4Life program has several components, in addition to the delivery of the actual lessons, including:

Keys4Life Teacher Professional Development (KFL PD): A one-day professional learning program that teachers and educators must complete to become registered to deliver the program and administer the Learner's Permit Test. The KFL PD is offered in metropolitan and regional areas of WA to both school teachers and staff at non-mainstream education and training services. In 2015, more than 400 staff attended 60 different PD sessions (Metrix Consulting, 2016).

Keys4Life Parent-Student Workshop: A one-hour information session for parents/carers and students which aims to involve parents and carers in road safety. These voluntary sessions are conducted after-hours at schools that implement the Keys4Life program. In 2015, 30% of schools running Keys4Life held a Parent-Student Workshop; 4197 parents/carers and students attended (Metrix Consulting, 2016).

Keys4Life Resources: The Keys4Life program includes a range of free resources for teachers, students and parents/carers, which are regularly updated. The main resources include a *Keys4Life Teacher Resource* containing the 10 Keys4Life lessons and activities based on best practice road safety education, the *Behind the Wheel Student Journal* that is compulsory for students to complete at home before they sit the Learner's Permit Test, and the *Keys4Life Student Workbook,* which is an alternative workbook to the journal that students complete during the Keys4Life lessons.. The Department of Transport's Drive Safe book and your Secure Identity fact sheet are also available for all participating teachers and students.

DoE consultants: The DoE regional and metropolitan consultants are based in 12 locations across WA (Perth and 11 regional areas). Their role in the Keys4Life program is to train and engage teachers and educators to implement Keys4Life and deliver Parent-Student Workshops. The DoE metropolitan consultants also provide overall administration of the program including development of resources and professional learning programs, support and supervision of DoE regional consultants (in relation to the Keys4Life program), management of resource stocks, reporting to and liaison with key stakeholders, ongoing monitoring and review of the program, and development of program and system improvements.

Stakeholders: The metropolitan DoE consultants maintain close links with several road safety stakeholders in WA through the WA Road Safety Education Committee (WARSEC). Representatives from several of these stakeholder organisations are invited to a short session during the metropolitan KFL PDs, where they provide teachers with a brief overview about the initiatives and services they provide to schools that complement and reinforce messages raised during Keys4Life lessons. This information is presented as an option that teachers can choose to utilise.

1.5   Previous evaluations

The first evaluation of the Keys4Life program was conducted in 2008 by Quantum Consulting for the Office of Road Safety (Office of Road Safety, 2009) and the second in 2015 by Metrix Consulting (Metrix Consulting, 2016; Office of Road Safety, 2009). These were both process evaluations which examined the effectiveness of the program's implementation. The 2008 evaluation included an analysis of program engagement data, online surveys of teachers (n=151) and Principals (n=58), paper-based surveys of students participating in Keys4Life (n=118) and parents/carers attending Parent-Student Workshops (n=100), site visits to engaged and non-engaged schools, and interviews with stakeholders (Office of Road Safety, 2009). The 2015 evaluation analysed engagement data, conducted interviews with Principals of non-engaged schools (n=6), DoE regional consultants (n=4) and stakeholders (n=15), and conducted online surveys of school teachers (n=281) and paper surveys of students (n=71) and parents/carers (n=96) attending Parent-Student Workshops (Metrix Consulting, 2016). The findings of both evaluations were positive—Keys4Life was performing well on its key objectives, and there was a high level of participant satisfaction (Metrix Consulting, 2016; Office of Road Safety, 2009). Both evaluations offered recommendations in terms of the promotion, reach and communication of Keys4Life and the systems used to administer the

project. Examples of changes made since the last evaluation include the creation of an online portal for uploading student test results and an online version of the Keys4Life program provided during the COVID-19 pandemic.

1.6 Current evaluation

The current evaluation repeats and extends the previous evaluations in terms of the process and engagement evaluation. It is useful to regularly measure how the Keys4Life program is performing and compare it to previous years. Phase 2 of this evaluation will also survey agency teachers and students about their experiences and perceptions of the program. This will be the first evaluation to include non-school settings. Finally, an online questionnaire will be administered to school students before and after participation in Keys4Life in order to evaluate the program's impact on attitudes and risk perception. This will the first evaluation of Keys4Life program outcomes.

The Keys4Life program evaluation was initially to be undertaken in 2020. However, due to the COVID-19 pandemic and its associated disruption to schools, the project was delayed and extended into 2021. This report is the first phase of the evaluation, which is divided into five parts:

- Part A: Keys4Life program engagement

- Part B: Parent-Student Workshop engagement

- Part C: Teacher KFL PD engagement

- Part D: Stakeholder and DoE consultant interviews

- Part E: Development of pre-and-post questionnaire

The second phase of the evaluation will administer the online pre-and-post questionnaire for school students and online surveys for school teachers, Principals/school leaders, agency teachers and agency students. Ethics approval was received from the UWA Human Research Ethics Committee and approved by Catholic Education WA (CEWA) and the DoE.

1.7 Objectives

The objectives of the first phase of the Keys4Life program evaluation are to:

1. Analyse Keys4Life program engagement data from 2003–2020 for school, teacher, parent/carer and student participation, including analysis by region

(metropolitan/regional), education system/organisation (DoE, CEWA, Association of Independent Schools of Western Australia (AISWA), non-school agency) and year.

2. Analyse data from student and parent/carer questionnaires completed at Parent-Student Workshops held from 2017–2019.

3. Analyse data from questionnaires completed by teachers who attended Keys4Life PD between July 2017 and March 2020.

4. Conduct in-depth interviews with DoE consultants and stakeholders involved in the Keys4Life program.

5. Develop a pre-and-post questionnaire for students who undertake the Keys4Life program to assess changes in beliefs, attitudes and behaviour related to road safety.

2 PART A: KEYS4LIFE PROGRAM ENGAGEMENT

2.1 Background: Part A

Keys4Life has various components that can be evaluated to determine the engagement or reach of the program. Keys4Life can be implemented in both schools and non-mainstream education and training services (agencies) with school students and non-school students participating. Schools can also enrol students for the SCSA-endorsed Keys4Life courses, however this process is not compulsory. Schools can also host a Keys4Life Parent-Student workshop (information session). This session is presented to parents/carers and students at the school (after hours).

The Keys4Life program is underpinned by the Keys4Life guidelines established by the Department of Transport in 2003.

Every year DoE provides a series of Keys4Life professional learning workshops (KFL PDs) across the state. All KFL PDs are facilitated by DoE consultants and available to teachers and educators (from schools and agencies) in both metropolitan and regional areas. According to the Keys4Life guidelines it is compulsory for teachers and educators to attend a KFL PD prior to implementing the Keys4Life program. All teachers and educators who attend a KFL PD:

- sign a Keys4Life Teacher Agreement (based on Department of Transport guidelines);

- are trained and supported to deliver a 10-lesson Keys4Life program and administer the Learner's Permit Test (according to the guidelines); and

- are recorded by DOE as a 'Registered Keys4Life Teacher' providing them with:

  o the knowledge, resources and capacity to implement a minimum of 10 Keys4Life lessons;

  o the authorisation to administer the Learner's Permit Test;

  o a Keys4Life access number for ordering resources and test materials;

  o a Keys4Life portal user account enabling test results to be uploaded and Keys4Life certificates to be processed and dispatched to the school/agency.

  o the opportunity to annually renew their Keys4Life registration.

Keys4Life program engagement was analysed in 2008 and 2015; the current analysis continues and extends this work. The objective of Part A was to:

1. Analyse Keys4Life program engagement data from 2003–2020 for school, teacher, parent/carer and student participation, including analysis by region (metropolitan/regional), education system/organisation (DoE, CEWA, AISWA, non-school agency) and year.

2.2 Methods: Part A

2.2.1 Sample

The sample included all available data on the number of schools, non-school agencies and students who participated in the Keys4Life program in WA between 2003 and 2020. It also included data on the number of teachers who completed the Keys4Life PD and the number of participants attending Parent-Student Workshops. The program was piloted in 2003 and commenced formally in 2004. Data has been included for the 2003 pilot year, but these are only estimates.

2.2.2 Data

The DoE collected and provided Keys4Life program engagement data for each calendar year to researchers in a de-identified and aggregated format. The variables provided are described below. It should be noted that in 2020, the Department implemented a new online Keys4Life portal to process and issue Keys4Life certificates, replacing the previous manual system. This provided a more accurate method for recording Keys4Life participation data in terms of the number of schools, agencies and students taking part in the program. The large increases observed in Keys4Life participation in 2020 are likely due to these improved recording methods.

2.2.2.1 School student participation

Data was provided about the number of school students participating in Keys4Life and the proportion of all Year 10 students participating from 2003–2020. The proportion of school students for each year was calculated based on the number of students who sat the Keys4Life Learner's Permit Theory Test at schools, divided by the total number of Year 10 student enrolments in WA. Most schools implement Keys4Life in Year 10, but it can also be implemented for Year 11 and 12 students. Therefore, these proportions are only estimates of Year 10 student engagement.

2.2.2.2 School participation

Data was provided about the number of schools implementing Keys4Life overall and by region (metropolitan/regional) and education system (DoE, AISWA and CEWA) for 2003–2020. The proportion of schools implementing Keys4Life (overall, region and education system), was calculated for each year based on the number of schools implementing Keys4Life, divided by the number of WA secondary schools with capacity to implement the program. Most secondary schools in WA have capacity, with 336 of 391 secondary schools (86%) having capacity in 2020. Those without capacity include those with less than 20 students enrolled in Years 7–12, camp schools, Education Support Centres and Schools where the majority of students are medically precluded from driving a vehicle, Schools of Special Education Needs, Schools of Isolated and Distance Education, Residential Colleges, Primary Schools and Language Development Centres. The exact number of schools with capacity was not known for 2016–2019, so the 2020 figures were applied to these years. Therefore, the proportions of schools implementing Keys4Life are estimates.

2.2.2.3 Participation in SCSA-endorsed Keys4Life programs

Data about the number of students enrolled in SCSA-endorsed Keys4Life programs and the percentage of all Keys4Life students enrolled in SCSA-endorsed programs was provided for 2011–2020. The number and percentage of schools enrolling students in SCSA-endorsed Keys4Life programs was provided. Schools can choose to:

- implement and enrol students in the 10-lesson SCSA-endorsed Keys4Life course for which students receive acknowledgement on their Western Australia Statement of Secondary Achievement and Western Australian Certificate of Education (WACE); or

- implement and enrol students in the 40-lesson SCSA-endorsed Keys4Life course for which students receive five graduation points towards their Western Australia Statement of Secondary Achievement and Western Australian Certificate of Education (WACE).

Schools are not required to enrol students in SCSA-endorsed Keys4Life courses, and students who are not enrolled receive the same lessons and content as those who are enrolled.

2.2.2.4 Agency participation

The number of agencies implementing Keys4Life and the number of participants through these agencies from 2006–2020 was provided.

2.2.2.5 Keys4Life professional development

The number of Keys4Life PD sessions held and the number of school/agency staff attending these sessions from 2003–2020 were provided. Completing the KFL PD is compulsory to deliver the Keys4Life program and administer the Learner's Permit Test. The KFL PD is run in metropolitan and regional areas, with some run as webinars.

2.2.2.6 Keys4Life Parent-Student Workshops

The number of parents/carers and students who attended Parent-Student Workshops (information sessions) and the proportion of Keys4Life schools hosting these sessions from 2004–2020 was provided. The Parent/-Student Workshop is not compulsory.

2.2.2.7 Learner's Permits issued

The number of Learner's Permits issued by Department of Transport to people aged 17–24 years in WA from 2006–2020 was provided.

2.2.3 Data analysis

Engagement in the Keys4Life program was described in terms of the number and proportion of each variable. Data was also plotted by calendar year using line graphs in Excel.

Curve fitting methods were used to analyse trends in the total number of school students and total number of schools implementing Keys4Life over the study period (2003–2020). Using this approach, a trendline that best fits a series of data points (based on R^2 value) is constructed, which may be linear, exponential or quadratic, to understand the pattern of engagement with the program over time. Curve fitting was also used to examine trends in the proportion of schools with capacity implementing Keys4Life by region (metropolitan/regional) and education system (DoE, CEWA, AISWA) from 2003–2020.

Chi-square tests were used to determine differences in program engagement for schools by region (metropolitan/regional) and education system (DoE, CEWA, AISWA). The proportions of schools implementing Keys4Life were compared for each year independently, and results reported for 2020 only. For education system, pairwise comparisons were performed, and the Bonferroni correction applied due to multiple comparisons.

The proportion of young drivers (17–24 years) issued a Learner's Permit in WA in 2020 who had participated in Keys4Life was estimated by dividing the number of Keys4Life participants by the number of Learner's Permits issued.

2.3 Results: Part A

Overall, there is a high level of engagement with the Keys4Life program in WA. In 2020, more than 23,000 pre-drivers from 254 schools and 62 agencies participated in Keys4Life. Engagement in the Keys4Life program is described below in terms of school students, schools, agencies, KFL PD, Parent-Student Workshops and licensing.

2.3.1 School student participation in Keys4Life

Figure 2.1 shows the number and proportion of school students participating in the Keys4Life program in WA from 2003 to 2020. A linear trendline has been fitted for the number of students (R^2=0.90). The number of participating school students has steadily increased over time, with some fluctuation between 2012 and 2020. In 2020, the proportion of students participating was approximately 73% of the Year 10 cohort in WA.

Figure 2.1 School student participation in Keys4Life, 2003–2020
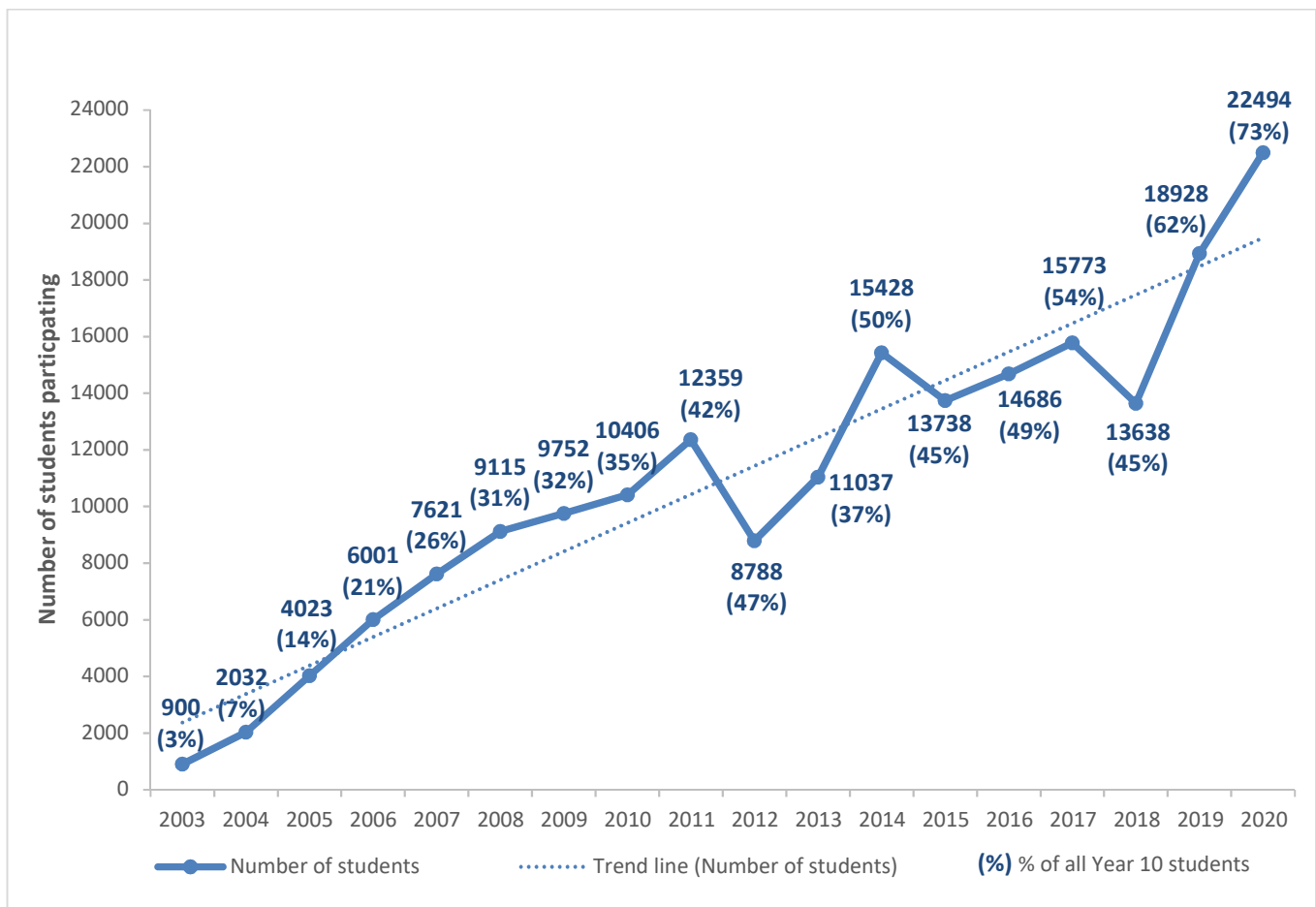
2.3.2   School participation in Keys4Life

2.3.2.1   Overall school participation

Figure 2.2 shows the total number of schools implementing Keys4Life in WA from 2003 to 2020. It also shows the proportion of schools with capacity implementing the program. A quadratic trendline has been fitted for the number of schools (R^2=0.99). The number of participating schools steadily increased between 2003 and 2010, then slowed from 2011 to 2019, with a large increase in 2020. In 2020, 254 schools implemented Keys4Life, representing approximately 76% of schools with capacity to implement the program in WA.

Figure 2.2 Schools implementing Keys4Life, 2003–2020
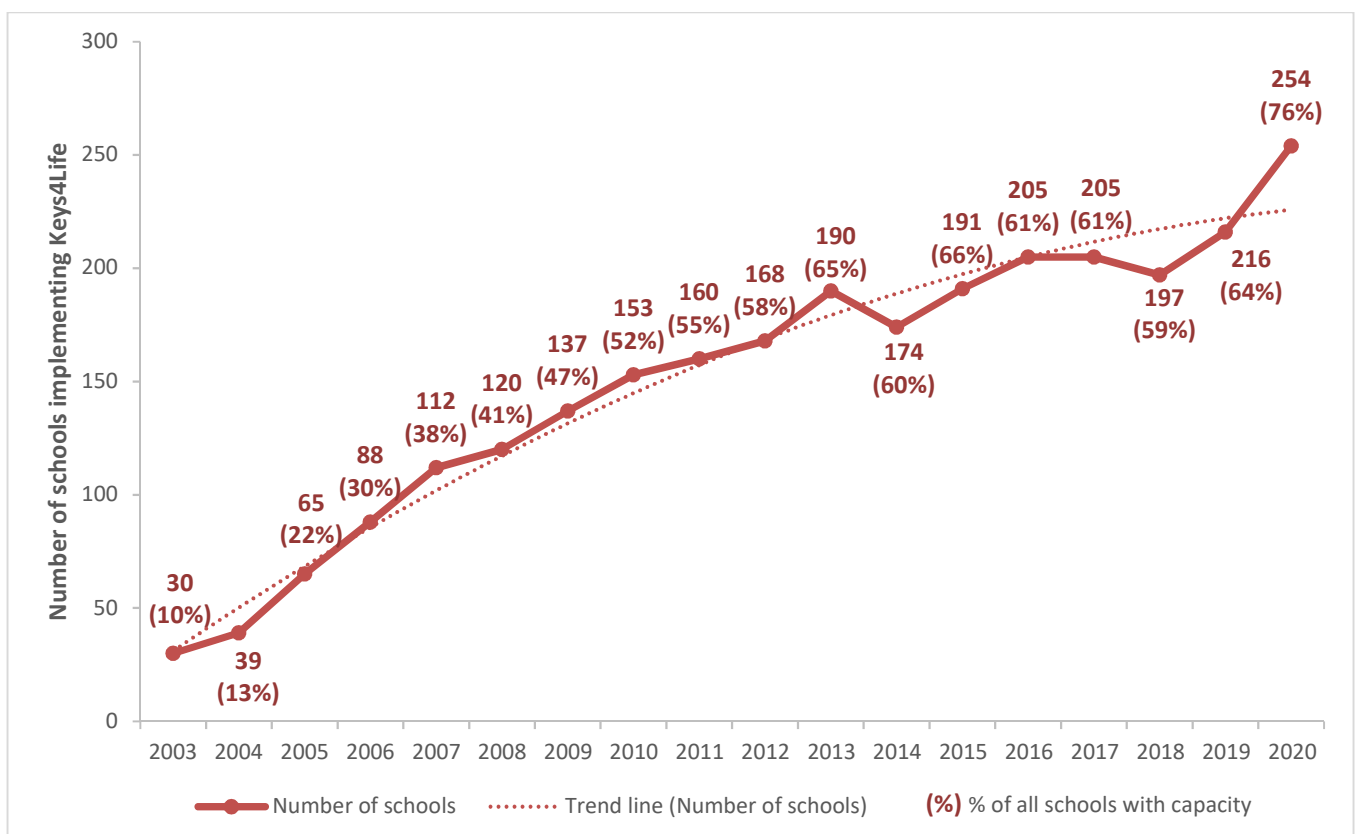
2.3.2.2   School participation by region

Figure 2.3 shows the proportion of metropolitan and regional schools with capacity, implementing Keys4Life from 2003–2020. Quadratic trendlines have been fitted for both metropolitan (R^2=0.94) and regional (R^2=0.93) schools. Between 2004 and 2011, a slightly higher proportion of regional schools implemented Keys4Life than metropolitan schools; from

2011–2014, the proportions were similar; after 2014, a higher proportion of metropolitan schools implemented Keys4Life than regional schools. The proportion of regional schools implementing Keys4Life peaked in 2013 (66%), reduced, then returned to 65% in 2020. In 2020, 165 metropolitan and 89 regional schools implemented Keys4Life. Chi-square tests showed that a significantly higher proportion of metropolitan schools with capacity (83%) implemented Keys4Life in 2020 than regional schools (65%) ($p<0.001$).

Figure 2.3 Proportion of schools implementing Keys4Life in WA by region, 2003–2020
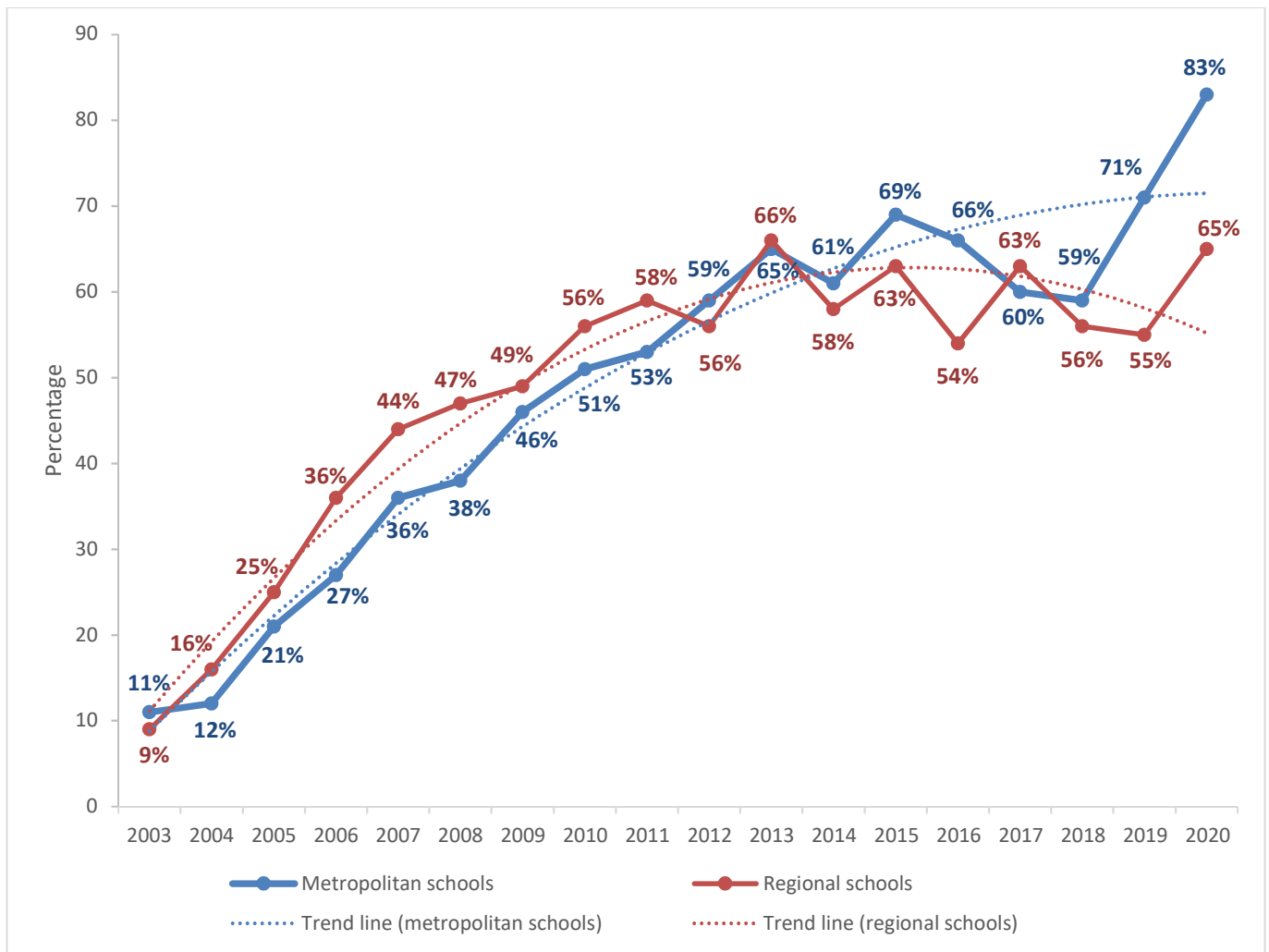
2.3.2.3 School participation by education system

Figure 2.4 shows the proportion of DoE, CEWA and AISWA schools with capacity, implementing Keys4Life from 2003–2020. Quadratic trendlines have been fitted for DoE (R^2=0.93) and CEWA (R^2=0.95) schools and a linear trendline for AISWA schools (R^2=0.93). The proportion of DoE schools implementing Keys4Life increased rapidly, reaching 77% in

2013. This proportion then decreased slightly to 68% by 2019, before a large increase in 2020 to 80% of DoE schools. The proportion of CEWA schools also increased steadily from 2003 to 2013 (67%), fluctuating somewhat in the following years, before peaking at 78% in 2020. The proportion of AISWA schools implementing Keys4Life increased steadily over the study period but was consistently lower than DoE and CEWA schools.

In 2020, 145 DoE schools, 38 CEWA schools and 71 AISWA schools implemented Keys4Life. Pairwise comparisons by education system using chi-square tests revealed a significantly lower proportion of AISWA schools (68%) implemented Keys4Life in 2020 than DoE schools (80%) (p=0.02). There were no other significant differences.

Figure 2.4 Proportion of schools implementing Keys4Life by education system in WA, 2003–2020
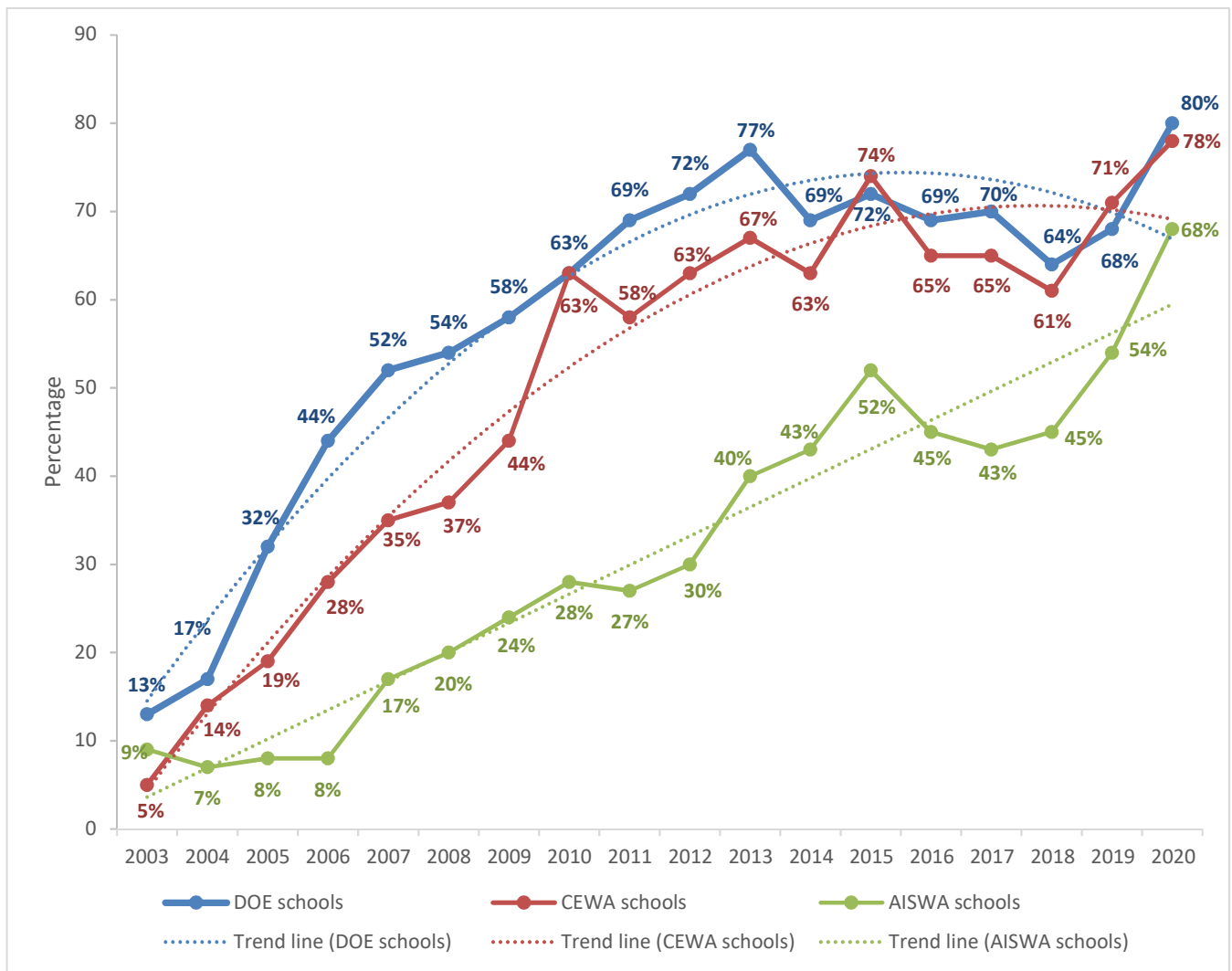
2.3.3 SCSA-endorsed Keys4Life programs

Figure 2.5 shows the number and percentage of students enrolled in SCSA-endorsed Keys4Life programs from 2011–2020. It also shows the number and percentage of schools enrolling students in SCSA-endorsed Keys4Life programs. In 2008, the SCSA endorsed two versions of the Keys4Life program. Students enrolled in the SCSA-endorsed 10-lesson program received one point towards graduation while those enrolled in the 40-lesson course received three points. In 2015, the points system changed due to a SCSA change in the policy about endorsed courses. It resulted in the accrual of one graduation point being removed for the 10-lesson program and instead students received an *'Achievement (A)'* on their certificate. Students enrolled in the 40-lesson course received a full unit equivalence (5 points). The number of students enrolled in SCSA-endorsed Keys4Life programs increased from 2011 to 2014 (Figure 2.5). Following the changes to graduation points in 2015, student enrolments decreased. From 2015 to 2020, the number of student enrolments remained relatively consistent, but the proportion of students participating in Keys4Life enrolled in SCSA-endorsed programs decreased from 41% to 20%. The number of schools enrolling students in SCSA-endorsed programs was also relatively consistent between 2011 and 2014 but decreased in 2015 (Figure 2.5). From 2015 to 2020, the proportion of Keys4Life schools that enrolled students in SCSA-endorsed programs decreased from 44% to 33%.

Figure 2.5 School and student participation in SCSA-endorsed Keys4Life programs, 2011–2020
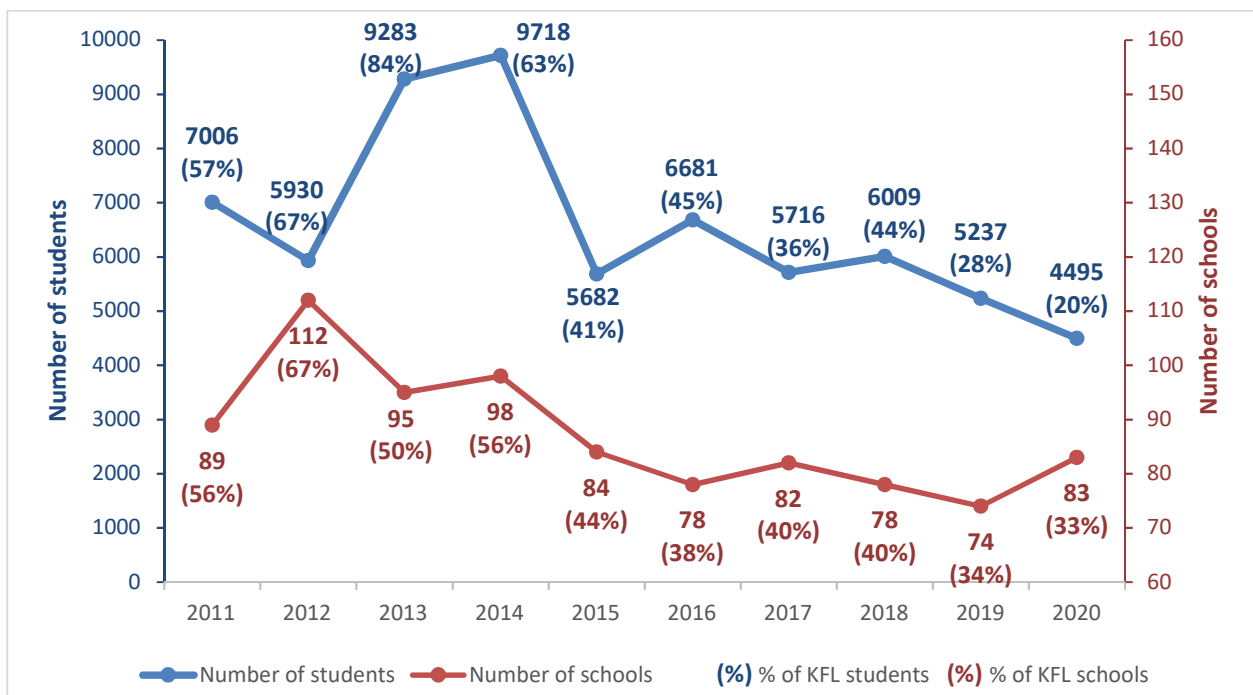
2.3.4 Keys4Life implementation in agencies

Figure 2.6 shows the number of agencies implementing Keys4Life and the number of participants through these agencies from 2006–2020. Participation numbers trended upwards from 2006 to 2017, peaking at 50 agencies and 941 students. Participation increased significantly in 2014, after the introduction of Keys4Life Online (a multimedia learning resource) in 2013, and in 2017 before decreasing in 2018 and 2019. The number of agencies delivering Keys4Life almost doubled in 2020 (compared to 2019) while the number of agency students increased by 12%.

In 2020, the types of agencies implementing Keys4Life included corrective services (detention centres and prisons), youth services, disability services, mental health services, employment and job training centres, Curriculum and Re-engagement in Education (CARE) Schools and alternative learning centres, Local Government Authorities, Aboriginal development and training centres, Allied Health organisations, child and parent centres, and TAFE WA.

Figure 2.6 Keys4Life program implementation in agencies, 2006–2020
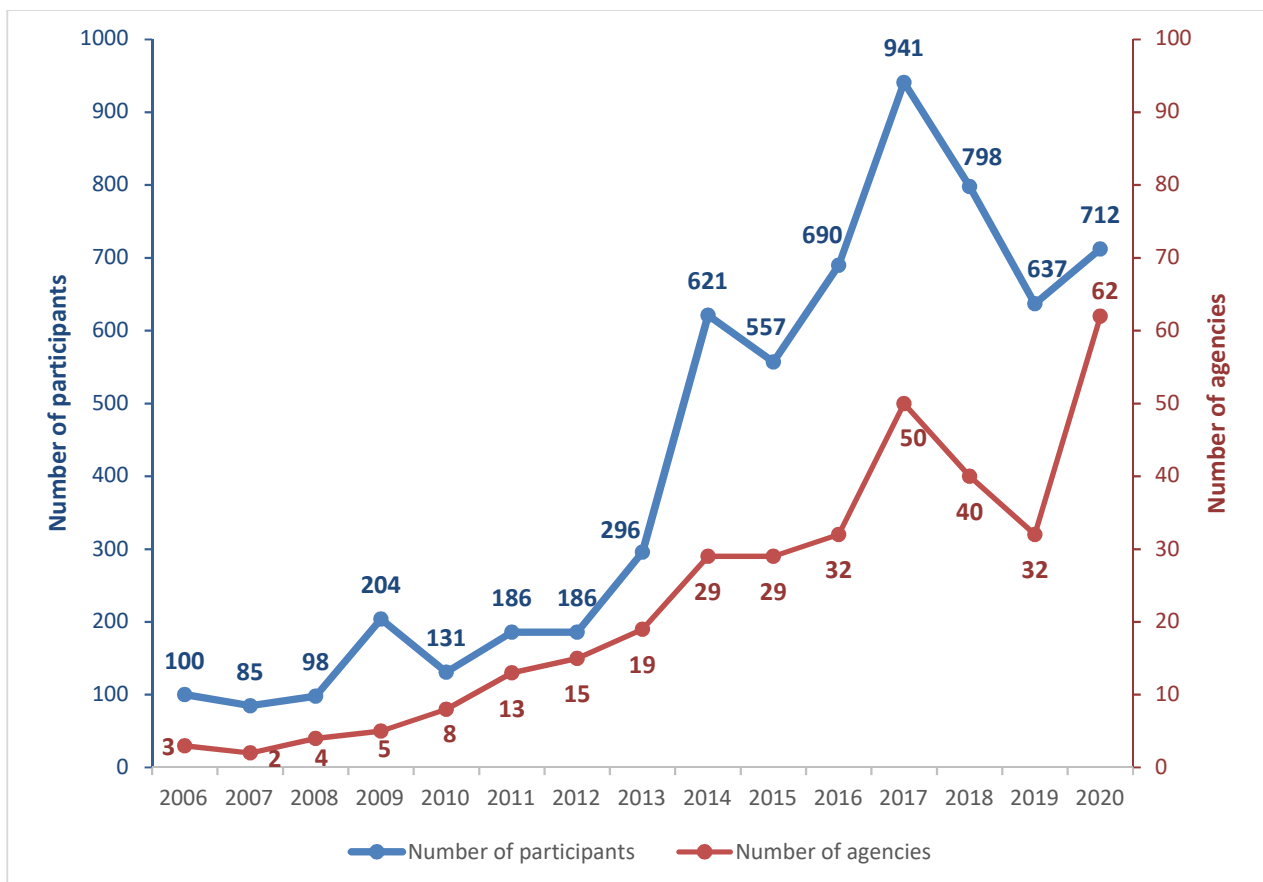
2.3.5 Keys4Life PD

Figure 2.7 shows the number of Keys4Life PD sessions held and the number of school/agency staff attending the sessions from 2003 to 2020. The number of KFL PD sessions and staff attending increased between 2003 and 2016, with 497 staff attending 71 PD in 2016. The number of KFL PD sessions and participants declined from 2016 to 2019. There was a large increase in KFL PD sessions (n=90) and teachers attending (n=555) in 2020.

Figure 2.7 Keys4Life PD sessions and participants, 2003–2020
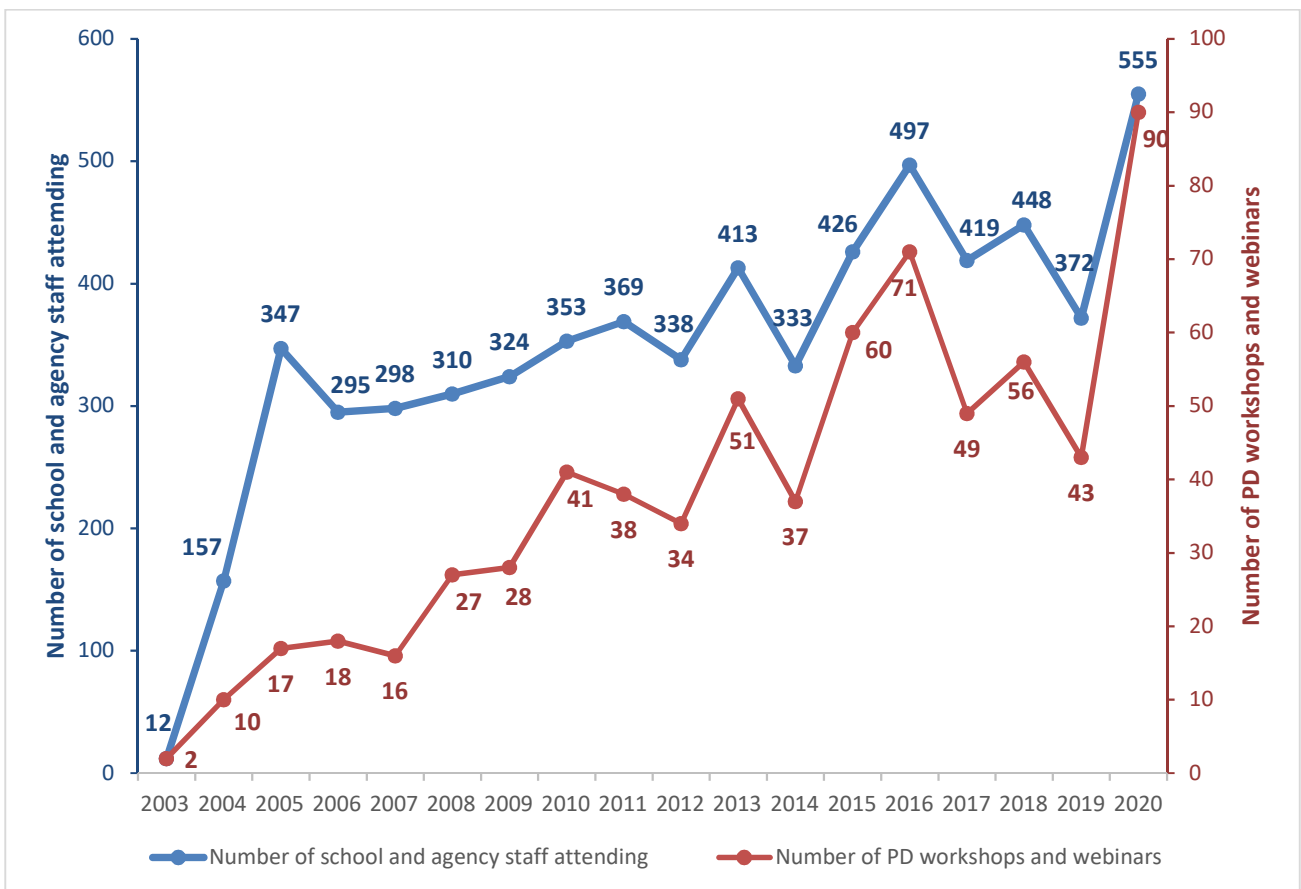
2.3.6 Parent-Student Workshops

Figure 2.8 shows the number of parents/students who attended Parent-Student Workshops and the proportion of Keys4Life schools hosting workshops from 2004 to 2020. Parent-Student participation in the workshops has fluctuated over time, with a large increase in participation in 2010. Between 2010 and 2019, the number of participants fluctuated, declining to 3559 in 2019. In 2011, half of the schools implementing Keys4Life hosted a Parent-Student Workshop,

declining to 27% by 2019. The proportion of schools hosting Workshops decreased further in 2020 to 11%, with 1395 participants attending.

Figure 2.8 Participation in Keys4Life Parent-Student Workshops, 2004–2020
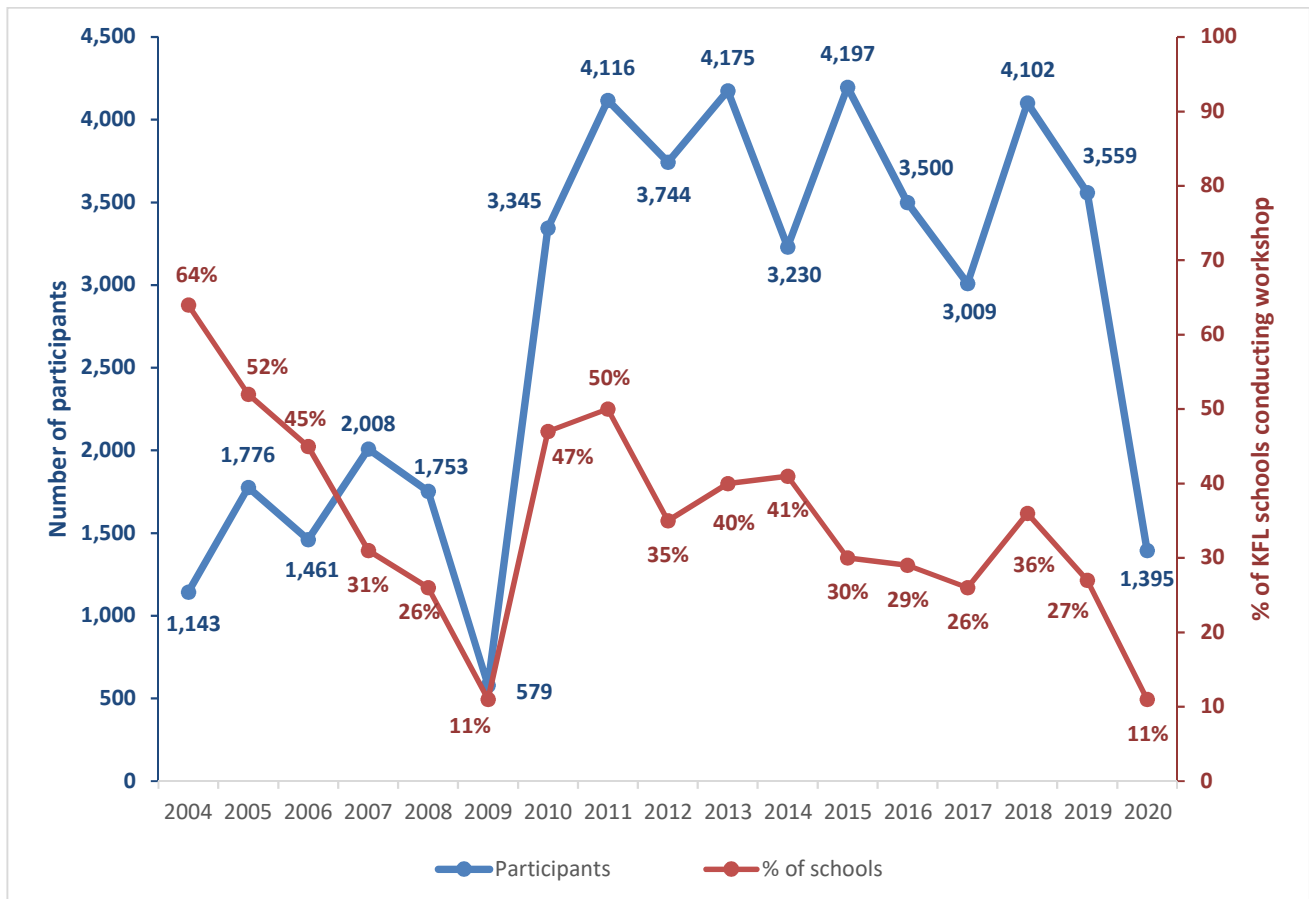
2.3.1 Learner's Permits in WA

In 2020, the Department of Transport issued 36,640 Learner's Permits in WA to people aged 17–24 years. Also in 2020, 23,206 students participated in the Keys4Life program through schools and agencies in WA. That is, nearly two-thirds of those obtaining their Learner's Permit in 2020 are estimated to have participated in the Keys4Life program (63.3%), increasing from approximately one-third in 2015 (32.4%).

2.4   Discussion: Part A

Part A of the evaluation found high levels of engagement with the Keys4Life program in WA and continued growth in the number of participants since the previous evaluations. The number of participating schools and school students has steadily increased since the inception of Keys4Life and the most recent evaluation in 2015 (Metrix Consulting, 2016). It is estimated that 73% of the Year 10 cohort in WA and 76% of schools with capacity participated in Keys4Life in 2020. This represents a high level of engagement for a course that is not compulsory.

The proportion of total participating schools with capacity steadily increased from 2003 to 2010, then increased at a slower rate from 2011 to 2019, plateauing at around 65%. The large increase in school engagement in 2020 to 76% of schools with capacity is most likely the result of improved recording methods due to the introduction of the online Keys4Life portal. This system can more accurately capture the number of participating schools and students than the previous manual system. The 2015 evaluation reported that the main barriers to implementing Keys4Life for schools were full timetables, program length and the time required to prepare and deliver Keys4Life (Metrix Consulting, 2016). Phase 2 of this evaluation will investigate barriers to implementing Keys4Life for some of the 24% of schools who do not deliver the program.

The proportion of regional schools with capacity implementing Keys4Life has plateaued since 2013. In 2020, a significantly higher proportion of metropolitan schools (83%) implemented Keys4Life than regional schools (65%). Over the study period, a lower proportion of AISWA schools participated in Keys4Life than DoE and CEWA schools. It would be beneficial to identify specific barriers to implementing Keys4Life for regional and AISWA schools to determine whether any modifications could be made to the program to address these.

Schools implementing Keys4Life can choose to enrol students with SCSA however, this is not compulsory. Following changes to graduation points in 2015, Keys4Life student enrolments with SCSA decreased. From 2015 to 2020, the number of students enrolled in SCSA-endorsed programs remained consistent, but the proportion of Keys4Life students enrolled with SCSA decreased from 41% to 20%. This may be because teachers find the administrative process involved in enrolling students with SCSA inconvenient. Students receive identical Keys4Life content whether they are enrolled with SCSA or not and those completing the 10-lesson SCSA-endorsed program receive an *'Achievement (A)'* but no points towards their WACE (SDERA,

2019). Since most students complete the 10-lesson program, teachers may perceive little benefit to enrolling students with SCSA.

This evaluation also showed that a wide variety of non-school agencies implemented Keys4Life in 2020. Agencies represent an important way to deliver road safety messages to youth who may have left school, are in vocational training or employment, have a disability, are incarcerated, experiencing challenges or are otherwise disadvantaged. The number of agencies and agency students participating in Keys4Life has increased since 2006, despite declining between 2017 and 2019. The number of agencies delivering Keys4Life almost doubled in 2020 (compared to 2019) while the number of agency students increased by 12%. A possible explanation for this is that more agency teachers were able to become accredited due to the KFL PD being delivered online in 2020, but agencies ran Keys4Life with only small groups of students due to COVID-19. In 2020 the worldwide COVID-19 pandemic impacted the face-to-face delivery of KFL PDs. To meet the ongoing demand for the compulsory PD, DoE Consultants adapted the mode of delivery to online webinar delivery during most of 2020. The online PD delivery is particularly beneficial for remote teachers and teachers who are already trained in Keys4Life and require a *'refresher'* type of training. Another explanation for the increase in numbers may again be the improved Keys4Life recording methods that resulted from the introduction of the online portal. Since agencies reach young people and young adults who may not be enrolled in formal schooling, it is important to investigate the reasons for the increased engagement in 2020 and how the participation of agencies and agency students could continue to be encouraged.

Participation in the KFL PD was examined to identify how many new teachers and educators are registered by DoE to deliver Keys4Life each year. The number of teachers and educators completing KFL PD increased over time, peaking in 2016, and declining between 2016 and 2019. This reduction is to be expected since teachers can continue to implement the program on an annual basis once the KFL PD has been completed and there is no compulsory reaccreditation process. The DoE communicates with all registered Keys4Life teachers each year, recommending they attend a KFL 'refresher' PD every 3 to 5 years. This is a recommendation and not compulsory. Interestingly, there was a large increase in the number of KFL PD sessions delivered and teachers/ educators attending in 2020 this is likely due to the new online mode of PD delivery introduced due to COVID-19. This demonstrates an excellent method of increasing accessibility to the training and refresher training and engaging

more teachers to deliver Keys4Life in the future. In 2021, DoE consultants will deliver a combination both face to face and online webinars.

The evaluation looked at levels of engagement with Parent-Student Workshops. The workshop aims to involve parents/carers in road safety and provide information about the licensing system and supervised driving (SDERA, 2020a). It is recommended but not compulsory. In 2010, half of the schools implementing Keys4Life hosted a Parent-Student Workshop; however, by 2019, this proportion had declined to 27% of Keys4Life schools and may be due to increased teacher workload and/or decreased parent/carer interest in or availability to attend an evening workshop. The very low proportion of schools implementing a workshop in 2020 (11%) was due to the impact of COVID-19 restrictions. Previous research has found that active parental involvement in learner driving reduces the risk of crashes among young drivers (Curry, Peek-Asa, Hamann, & Mirman, 2015); meaning increasing parental involvement in Keys4Life would likely be beneficial for road safety. Therefore, it is important to investigate barriers to schools implementing and parents/carers attending Parent-Student Workshops and consider alternative options for engaging parents/carers.

There were some limitations to Part A of the study. Firstly, the exact number of schools with capacity was not known for 2016–2019, so 2020 figures were applied to these years. Therefore, the proportion of schools with capacity implementing Keys4Life are estimates. For future evaluations, it would be useful to compile the capacity data yearly to ensure accuracy. In addition, the Department of Transport records the number of people who present a Keys4Life Certificate during their Learner's Permit application, but there are some inaccuracies in the recording process/data. Accurate recording and data for this variable would be useful for understanding the reach of Keys4Life.

2.4.1 Recommendations

Recommendations from Part A of the evaluation are:

1. Investigate barriers to the implementation of Keys4Life for regional and AISWA schools.

2. Investigate reasons for the increased implementation of Keys4Life by non-school agencies in 2020 and market the program to relevant agencies that have never delivered or ceased delivering the program.

3. Explore alternative methods of delivering Parent-Student Workshops to reach more parents/carers, including online workshops held at a specific time, webinars that can be

watched at any time, a podcast of the workshop, or content delivery in a written format (electronic or paper copies).

3 PART B: KEYS4LIFE PARENT-STUDENT WORKSHOP

3.1 Background: Part B

Keys4Life Parent-Student Workshops (information sessions) are conducted after-hours at schools that implement the Keys4Life program. While holding a Keys4Life Parent-Student Workshop is recommended by the DoE, it is not compulsory for schools/organisations to host this workshop or for parents/carers and students to attend. The workshop aims to involve parents and carers in road safety and provide parents/carers and students with free resources and information about the learn to drive process, the licensing system, the importance of extensive and varied supervised driving experience for learner drivers, the importance of driving safe vehicles and tips about supervised driving (SDERA, 2020a). Parental and family involvement in the Keys4Life program is important because extensive and varied driving practice under supervision can significantly reduce the crash rate for provisional drivers (P-plate drivers) (Senserrick & Haworth, 2005), and parents/ carers are the main providers of driving supervision. This message is reinforced at the Parent-Student workshop. Up until 2019 the Parent-Student Workshops were predominantly delivered by the Royal Automobile Club (RAC) at metropolitan schools and by DoE consultants at regional schools. From January 2020, the Parent-Student Workshops were delivered by the RAC and DoE Consultants at metropolitan schools and by DoE consultants in regional schools. From January 2021, all Parent-Student workshops will be delivered by DoE consultants as the RAC has chosen to no longer be involved in this process. . The objective of Part B was to:

- Analyse data from student and parent/carer questionnaires completed at Parent-Student Workshops held from 2017–2019.

3.2 Methods: Part B

3.2.1 Study design

This cross-sectional study examined the responses of parents/carers and students who attended a Keys4Life Parent-Student Workshop from 2017–2019 and completed the questionnaire.

3.2.2 Sample

The sample comprised 2798 parents/carers and 2155 students who attended 169 separate workshops conducted at 93 different schools over the period. Not all Workshop attendees

completed the questionnaire. The total sample of Part B (n=4953) represents nearly half (46%) of all those who attended a Workshop between 2017 and 2019 (n=10,670).

3.2.3 Data

The DoE provided a de-identified database of Parent-Student responses to the researchers. After each workshop, parents/carers and students were invited to complete a separate questionnaire either on paper or online. The questionnaires comprised five questions; however, Question 4 was removed in 2019.

The parent/carer questions were:

1. I am more confident about teaching my son/daughter to drive as a result of this workshop
   Yes/no/unsure

2. I understand the benefits of choosing a vehicle with a high safety rating
   Yes/no/unsure

3. I found tonight's workshop worthwhile and would recommend it to other people
   Yes/no/unsure

4. I am aware that the workshop is part of the (SDERA) Keys4Life program
   Yes/no/unsure

5. I intend to do the following number of supervised driving hours with my son/daughter
   0–50 hours/50–80 hours/80–100 hours/100–120 hours

The student questions were:

1. I understand the benefits of supervised driving practice
   Yes/no/unsure

2. I understand the benefits of choosing a vehicle with a high safety rating
   Yes/no/unsure

3. I found tonight's workshop worthwhile and would recommend it to other people
   Yes/no/unsure

4. I am aware that the workshop is part of the (SDERA) Keys4Life program
   Yes/no/unsure

5. I intend to do the following number of supervised driving hours while I'm learning to drive
   0–50 hours/50–80 hours/80–100 hours/100–120 hours

3.2.4   Data analysis

The responses from parents/carers and students were analysed separately. Initially, the parent/carer and student samples were described in terms of region (metropolitan, regional), education system/organisation (DoE, CEWA, AISWA, non-school) and year.

The responses to each of the five survey questions were then described in detail using percentages. Further analyses were undertaken, where possible, using SPSS version 26. No further analyses were undertaken for Questions 2–4 for parents/carers or Questions 1, 2 and 4 for students due to low numbers in several cells.

For parent/carer responses to Question 1 and student responses to Question 3, the categories *'no'* and *'unsure'* were combined to create a binary outcome variable (no/unsure, yes). Chi-square and Fisher's Exact tests were used to examine differences in responses by region, education system/organisation and year. For education system/organisation and year, pairwise comparisons were performed, and the Bonferroni correction applied due to multiple comparisons.

Question 5 asked about the intended hours of supervised driving, and the outcome variable was ordinal. Therefore, for both parents/carers and students, Mann-Whitney U tests were used to examine differences in responses by region (two independent groups), Kruskal-Wallis H tests were used to examine differences by education system/organisation (two or more independent groups), and Jonckheere-Terpstra tests were used to examine differences by year (ordinal independent variable). Post-tests were used to make pairwise comparisons between education systems/organisations (Dunn test) and between years (pairwise Wilcoxon test), adjusted by the Bonferroni correction for multiple tests. In addition, parent/carer and student responses for Question 5 were compared using Mann-Whitney U tests. The tests were undertaken for all parents/students, regional parents/students and metropolitan parents/students.

The open-ended responses about the workshop from parents/carers and students were categorised as positive or negative. Specific suggestions for workshop improvement were listed and tabulated by the number of suggestions.

Finally, the survey responses were compared with the 2008 and 2015 evaluations.

3.3 Results: Part B

3.3.1 Sample

Data was provided for 2798 parents/carers and 2155 students who attended the Keys4Life Parent-Student Workshops from 2017–2019. These participants attended 169 separate workshops conducted at 93 schools over the period. Three-quarters of parents/carers (n=2141, 76.5%) and students (n=1635, 75.9%) attended workshops held in the metropolitan area. The largest proportion of participants attended workshops at DoE schools (n=1535 parents/carers (54.9%), n=1074 students (49.8%)), followed by AISWA schools (n=662 parents/carers (23.7%), n=544 students (25.2%)), CEWA schools (n=565 parents/carers (20.2%), n=504 students (23.4%)) and non-school sites (n=36 parents/carers (1.3%), n=33 students (1.5%)).

3.3.2 Overall responses

There was a positive response to the five survey questions about the workshop. Overall, 93–99% of parents/carers and 95–100% of students responded positively (*'yes'*) to Questions 1–4 (Figure 3.1). In addition, 95% of parents/carers and 96% of students responded that they intended to complete more than 50 hours of supervised driving, being the minimum requirement for licensing (*'50–80'*, *'80–100'* or *'100–120'* hours).

Figure 3.1 Responses to the Keys4Life Parent-Student Workshop

	More confident teaching son/daughter to drive as a result of the workshop	Understand the benefits of supervised driving practice	Understand the benefits of choosing a vehicle with a high safety rating	Found the workshop worthwhile and would recommend it to others	Aware that the workshop is part of the Keys4Life program	Intend to do more than 50 hours of supervised driving practice
Parents	93%	–	99%	98%	98%	95%
Students	–	100%	98%	95%	97%	96%

3.3.3 Confidence and benefits of supervised driving

3.3.3.1 Parent/carer responses

Question 1 of the survey asked parents/carers to respond to the statement *'I am more confident about teaching my son/daughter to drive as a result of this workshop'* (no, yes, unsure). Question 1 differed for students, so their responses are described separately. A total of 2782 parents/carers responded to Question 1, with most responding *'yes'* (n=2593, 93.2%) and 189 (6.8%) responding *'no/unsure'* (99 (3.5%) *'unsure'* and 90 (3.2%) *'no'*) (Table 3.1).

The results were examined by region, education system/organisation and year for parents/carers. There were some variations in responses across categories, with positive responses to Question 1 ranging from 86.9% to 95.7% (Table 3.1). To examine differences in parent/carer responses, the categories *'no'* and *'unsure'* were combined to create a binary outcome variable (no/unsure, yes) due to small numbers in some categories.

The responses between parents/carers in metropolitan and regional areas differed significantly ($p<0.001$), with a higher proportion of regional parents/carers (n=85, 13.1%) responding *'no/unsure'* to whether they were more confident about teaching their son/daughter to drive as a result of the workshop than metropolitan parents/carers (n=104, 4.9%) (Table 3.1).

The responses from parents/carers also significantly differed by education system/organisation ($p<0.001$). Pairwise comparisons showed that a higher proportion of parents/carers who attended a workshop at a CEWA school (n=64, 11.3%) responded *'no/unsure'* than those who attended workshops at DoE schools (n=89, 5.9%) ($p<0.001$) or AISWA schools (n=34, 5.1%) ($p<0.001$). No significant differences existed between the responses of parents/carers at DoE and AISWA schools ($p=0.51$) (Table 3.1). There were also no significant differences for parents/carers at non-school venues compared to school venues.

The responses of parents/carers significantly differed between years ($p<0.001$). A higher proportion of parents/carers who attended a workshop in 2019 (n=106, 10.5%) responded *'no/unsure'* than those in 2017 (n=35, 5.3%) ($p<0.001$) and 2018 (n=48, 4.3%) ($p<0.001$) (Table 3.1).

Table 3.1 Q1: I am more confident about teaching my son/daughter to drive as a result of this workshop: differences in parent/carer responses

	Parent/carer responses (n=2782)				p-value
	Yes		No/unsure		
	N	%	N	%	
Region					
Metropolitan	2028	95.1	104	4.9	
Regional	565	86.9	85	13.1	<0.001 [a]
System					
DoE	1431	94.1	89	5.9	
CEWA	501	88.7	64	11.3	
AISWA	627	94.9	34	5.1	
Non-school venue	34	94.4	2	5.6	<0.001 [b]
Year					
2017	624	94.7	35	5.3	
2018	1069	95.7	48	4.3	
2019	900	89.5	106	10.5	<0.001 [a]
Total	**2593**	**93.2**	**189**	**6.8**	

[a] Chi-square tests   [b] Fisher's Exact test

3.3.3.2 Students

A total of 2125 students responded to Question 1: *'I understand the benefits of supervised driving practice'* (no, yes, unsure). Most students (n=2120, 99.8%) responded *'yes'*, 4 (0.2%) responded *'unsure'* and 1 (0.0%) responded *'no'* (Table 3.2).

The results were examined by region, school system/organisation and year for students. Students across all categories responded similarly with 99.4–100% responding *'yes'* (Table 3.2). Therefore, no further analyses were performed or p-values calculated for Question 1.

Table 3.2 Q1: I understand the benefits of supervised driving practice, students

| | Student responses (n=2125) | | | | | |
| | Yes | | Unsure | | No | |
	N	%	N	%	N	%
Region						
Metropolitan	1619	99.7	4	0.2	1	0.1
Regional	501	100.0	0	0.0	0	0.0
System						
DoE	1044	99.7	3	0.3	0	0.0
CEWA	502	100.0	0	0.0	0	0.0
AISWA	541	99.6	1	0.2	1	0.2
Non-school venue	33	100.0	0	0.0	0	0.0
Year						
2017	524	99.4	3	0.6	0	0.0
2018	890	100.0	0	0.0	0	0.0
2019	706	99.7	1	0.1	1	0.1
Total	**2120**	**99.8**	**4**	**0.2**	**1**	**0.0**

3.3.4 Benefits of choosing a vehicle with a high safety rating

Question 2 of the survey asked both parents/carers and students to respond to the statement *'I understand the benefits of choosing a vehicle with a high safety rating'* (yes, unsure, no). A total of 2551 parents/carers and 1979 students responded to Question 2. This question was added to the survey in 2017, so response numbers are lower than for the other questions. Most parents/carers (n=2534, 99.3%) and students (n=1942, 98.1%) responded *'yes'* to this question, 11 parents/carers (0.4%) and 28 students (1.4%) responded *'unsure'* and six parents/carers (0.2%) and nine students (0.5%) responded *'no'* (Table 3.3).

The results were examined by region, school system/organisation and year for both parents/carers and students. Parents/carers across all categories responded similarly with 99–100% responding that they understand the benefits of choosing a vehicle with a high safety rating (Table 3.3). For students, 97–99% in each category responded *'yes'* to Question 2. Therefore, no further analyses were performed or p-values calculated for Question 2.

Table 3.3 Q2: I understand the benefits of choosing a vehicle with a high safety rating

	Parent/carer responses (n=2551)						Student responses (n=1979)					
	Yes		Unsure		No		Yes		Unsure		No	
	N	%	N	%	N	%	N	%	N	%	N	%
Region												
Metropolitan	1912	99.3	8	0.4	6	0.3	1449	97.9	23	1.6	8	0.5
Regional	622	99.5	3	0.5	0	0.0	493	98.8	5	1.0	1	0.2
System												
DoE	1327	99.3	6	0.4	4	0.3	931	98.2	12	1.3	5	0.5
CEWA	562	99.6	2	0.4	0	0.0	494	98.2	8	1.6	1	0.2
AISWA	623	99.2	3	0.5	2	0.3	496	97.8	8	1.6	3	0.6
Non-school venue	22	100.0	0	0.0	0	0.0	21	100.0	0	0.0	0	0.0
Year												
2017	414	99.0	3	0.7	1	0.2	346	96.9	9	2.5	2	0.6
2018	1108	98.9	7	0.6	5	0.4	875	98.3	12	1.3	3	0.3
2019	1012	99.9	1	0.1	0	0.0	721	98.5	7	1.0	4	0.5
Total	**2534**	**99.3**	**11**	**0.4**	**6**	**0.2**	**1942**	**98.1**	**28**	**1.4**	**9**	**0.5**

3.3.5 Worth of the workshop

Question 3 of the survey asked parents/carers and students to respond to the statement *'I found tonight's workshop worthwhile and would recommend it to other people'* (no, yes, unsure). A total of 2786 parents/carers and 2144 students responded to Question 3. Most parents/carers (n=2742, 98.4%) and students (n=2027, 94.5%) responded *'yes'*, 37 parents/carers (1.3%) and 98 students (4.5%) responded *'unsure'* and seven parents/carers (0.3%) and 19 students (0.9%) responded *'no'* (Table 3.4).

The results were examined by region, school system/organisation and year for both parents/carers and students. Parents/carers across all categories responded similarly with 98–100% responding that they found the workshop worthwhile and would recommend it (Table 3.4). No further analyses were performed or p-values calculated for parents for Question 3.

Table 3.4 Q3: I found tonight's workshop worthwhile and would recommend it to other people

	Parent/carer responses (n=2786)						Student responses (n=2144)					
	Yes		Unsure		No		Yes		Unsure		No	
	N	%	N	%	N	%	N	%	N	%	N	%
Region												
Metropolitan	2097	98.3	31	1.5	6	0.3	1520	93.5	87	5.4	19	1.2
Regional	645	98.9	6	0.9	1	0.2	507	97.9	11	2.1	0	0.0
System												
DoE	1500	98.4	21	1.4	4	0.3	1000	93.6	54	5.1	14	1.3
CEWA	556	98.4	8	1.4	1	0.2	484	96.6	16	3.2	1	0.2
AISWA	650	98.5	8	1.2	2	0.3	511	94.3	27	5.0	4	0.7
Non-school venue	36	100.0	0	0.0	0	0.0	32	97.0	1	3.0	0	0.0
Year												
2017	647	98.3	10	1.5	1	0.2	505	96.0	17	3.2	4	0.8
2018	1096	98.0	17	1.5	5	0.4	834	93.7	47	5.3	9	1.0
2019	999	98.9	10	1.0	1	0.1	688	94.5	34	4.7	6	0.8
Total	**2742**	**98.4**	**37**	**1.3**	**7**	**0.3**	**2027**	**94.5**	**98**	**4.5**	**19**	**0.9**

There were some variations in responses across categories for students, with positive responses to Question 3 ranging from 93.5–97.9% (Table 3.4). To examine differences in student responses to Question 3 by region, system and year, the categories *'no'* and *'unsure'* were combined to create a binary outcome variable (no/unsure, yes) due to small numbers in some categories. The responses between students in metropolitan and regional areas differed significantly (p<0.001), with a higher proportion of metropolitan students (n=106, 6.5%) responding 'no/unsure' to whether they found the workshop worthwhile and would recommend it than regional students (n=11, 2.1%). No significant differences existed for education system/organisation (p=0.087) or year (p=0.188) (Table 3.5).

Table 3.5 Q3: I found tonight's workshop worthwhile and would recommend it to other people: differences in student responses

| | Student responses (n=2144) | | | | p-value |
| | Yes | | No/unsure | | |
	N	%	N	%	
Region					
Metropolitan	1520	93.5	106	6.5	
Regional	507	97.9	11	2.1	<0.001 [a]
System					
DoE	1000	93.6	68	6.4	
CEWA	484	96.6	17	3.4	
AISWA	511	94.3	31	5.7	
Non-school venue	32	97.0	1	3.0	0.087 [b]
Year					
2017	505	96.0	21	4.0	
2018	834	93.7	56	6.3	
2019	688	94.5	40	5.5	0.188 [a]
Total	**2027**	**94.5**	**117**	**5.5**	

[a] chi-square test   [b] Fishers Exact test

3.3.6 Awareness that workshop is part of the Keys4Life program

Question 4 of the survey asked parents/carers and students to respond to the statement *'I am aware that the workshop is part of the (SDERA) Keys4Life program'* (no, yes, unsure). A total of 1556 parents/carers and 1408 students responded to Question 4. Most parents/carers (n=1518, 97.6%) and students (n=1372, 97.4%) responded *'yes'* to this question, 13 parents/carers (0.8%) and 25 students (1.8%) responded 'unsure' and 25 parents/carers (1.6%) and 11 students (0.8%) responded *'no'* (Table 3.6). This question was removed from the survey in 2019, so response numbers are lower than for the other questions.

The results were examined by region, school system/organisation and year for both parents/carers and students. Parents/carers and students across most categories responded similarly with 94.4–98.8% of parents/carers and 95.6–98.5% of students responding that they were aware the workshop was part of the Keys4Life program. A slightly lower proportion of parents/carers (n=24, 92.7%) and students (n=21, 91.3%) who attended a workshop at a non-school venue responded positively to Question 4 than those who attended at a school-based venue (Table 3.6), but the numbers were too low to perform further analyses.

Table 3.6 Q4: I am aware that the workshop is part of the Keys4Life program

	Parent/carer responses (n=1556)						Student responses (n=1408)					
	Yes		Unsure		No		Yes		Unsure		No	
	N	%	N	%	N	%	N	%	N	%	N	%
Region												
Metropolitan	1255	97.4	10	0.8	24	1.9	1148	97.3	22	1.9	10	0.8
Regional	263	98.5	3	1.1	1	0.4	224	98.2	3	1.3	1	0.4
System												
DoE	819	97.7	7	0.8	12	1.4	618	97.6	11	1.7	4	0.6
CEWA	229	98.3	2	0.9	2	0.9	305	97.8	4	1.3	3	1.0
AISWA	446	97.2	3	0.7	10	2.2	428	97.3	10	2.3	2	0.5
Non-school venue	24	92.3	1	3.8	1	3.8	21	91.3	0	0.0	2	8.7
Year												
2017	424	94.4	7	1.6	18	4.0	496	95.6	16	3.1	7	1.3
2018	1094	98.8	6	0.5	7	0.6	876	98.5	9	1.0	4	0.5
Total	**1518**	**97.6**	**13**	**0.8**	**25**	**1.6**	**1372**	**97.4**	**25**	**1.8**	**11**	**0.8**

3.3.7 Intentions for supervised driving hours

Question 5 of the survey asked parents/carers to respond to the statement *'I intend to do the following number of supervised driving hours with my son/daughter'* (1–50, 50–80, 80–100, 100–120 hours). It asked students to respond to a similar statement *'I intend to do the following number of supervised driving hours while I'm learning to drive'* (1–50, 50–80, 80–100, 100– 120 hours). A total of 2775 parents/carers and 2127 students responded to Question 5. Most parents/carers (n=2648, 95.4%) and students (n=2038, 95.8%) responded that they intended to complete more than 50 hours of supervised driving, being the minimum required for licensing. More than half of the parents/carers (n=1535, 55.3%) and just under half of the students (n=972, 45.7%) intended to complete 100–120 hours of supervised driving (Figure 3.2, Table 3.7, Table 3.8). The results were examined by region, school system/organisation and year for both parents/carers and students. Differences in intended supervised hours were found for all three variables for parents/carers and students.

Figure 3.2 Intended hours of supervised driving for parents/carers (n=2775) and students (n=2127)
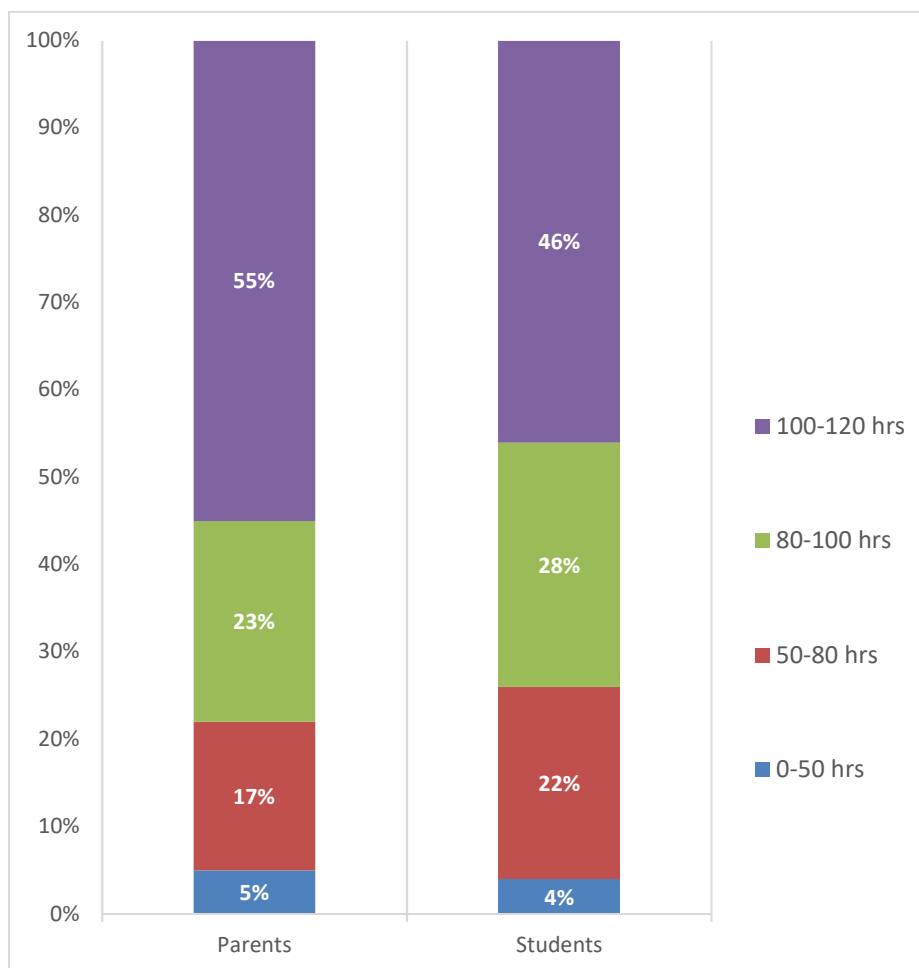
3.3.7.1 Parents/carers

Intended supervised driving hours of parents/carers were examined by region. While the proportion of parents/carers intending to complete 0–50 or 50–80 hours was similar in metropolitan and regional areas, a higher proportion of metropolitan parents/carers intended to complete 100–120 hours (57.9%) than regional parents/carers (47.0%) (Table 3.7, Figure 3.3). An independent samples Mann-Whitney U test showed a significant difference in responses, with parents/carers who attended workshops in the metropolitan area intending to complete more supervised driving hours than regional parents/carers ($p<0.001$).

Intended supervised driving hours of parents/carers were examined by education system/organisation. A lower proportion of parents/carers attending non-school venues intended to complete 80–100 or 100–120 hours (52.8%) than school parents/carers (78.5–78.9%) (Table 3.7, Figure 3.3). An independent samples Kruskal-Wallis test showed a significant difference by education system/organisation overall ($p=0.002$). Pairwise comparisons showed that intended supervised driving hours were similar for parents/carers at DoE schools and AISWA schools ($p=1.000$). However, parents/carers at DoE schools intended to complete significantly more hours than those at CEWA schools ($p=0.005$) and non-school venues ($p=0.009$). Parents/carers at AISWA schools also intended to complete significantly more hours than those at non-school venues ($p=0.032$). There were no other significant differences.

Intended supervised driving hours of parents/carers were examined by year. The proportion of parents/carers intending to complete 100–120 hours increased from 48.0% in 2017 to 54.6% in 2018 and 60.8% in 2019 (Table 3.7, Figure 3.3). The independent samples Jonckheere-Terpstra test for ordered alternatives showed a significant difference between years overall ($p<0.001$). Pairwise comparisons showed that the intended level of supervised driving hours for parents/carers was significantly higher in 2018 than 2017 ($p=0.003$), 2019 than 2018 ($p=0.004$) and 2019 than 2017 ($p<0.001$).

Table 3.7 Q5: I intend to do the following number of supervised driving hours with my son/daughter

	Parent/carer responses (n=2775)								p-value
	0–50 h		50–80 h		80–100 h		100–120 h		
	N	%	N	%	N	%	N	%	
Region									
Metropolitan	102	4.8	355	16.7	437	20.6	1228	57.9	<0.001[a]
Regional	25	3.8	119	18.2	202	31.0	307	47.0	
System									
DoE	77	5.1	250	16.4	336	22.1	857	56.4	0.002[b]
CEWA	23	4.1	96	17.0	164	29.1	281	49.8	
AISWA	23	3.5	115	17.6	133	20.3	384	58.6	
Non-school venue	4	11.1	13	36.1	6	16.7	13	36.1	
Year									
2017	44	6.8	136	21.0	157	24.2	311	48.0	<0.001[c]
2018	48	4.3	195	17.5	263	23.6	609	54.6	
2019	35	3.5	143	14.1	219	21.6	615	60.8	
Total	**127**	**4.6**	**474**	**17.1**	**639**	**23.0**	**1535**	**55.3**	

a Mann-Whitney U test   b Kruskal-Wallis test   c Jonckheere-Terpstra test

Figure 3.3 Intended hours of supervised driving for parents/carers (n=2775)

47
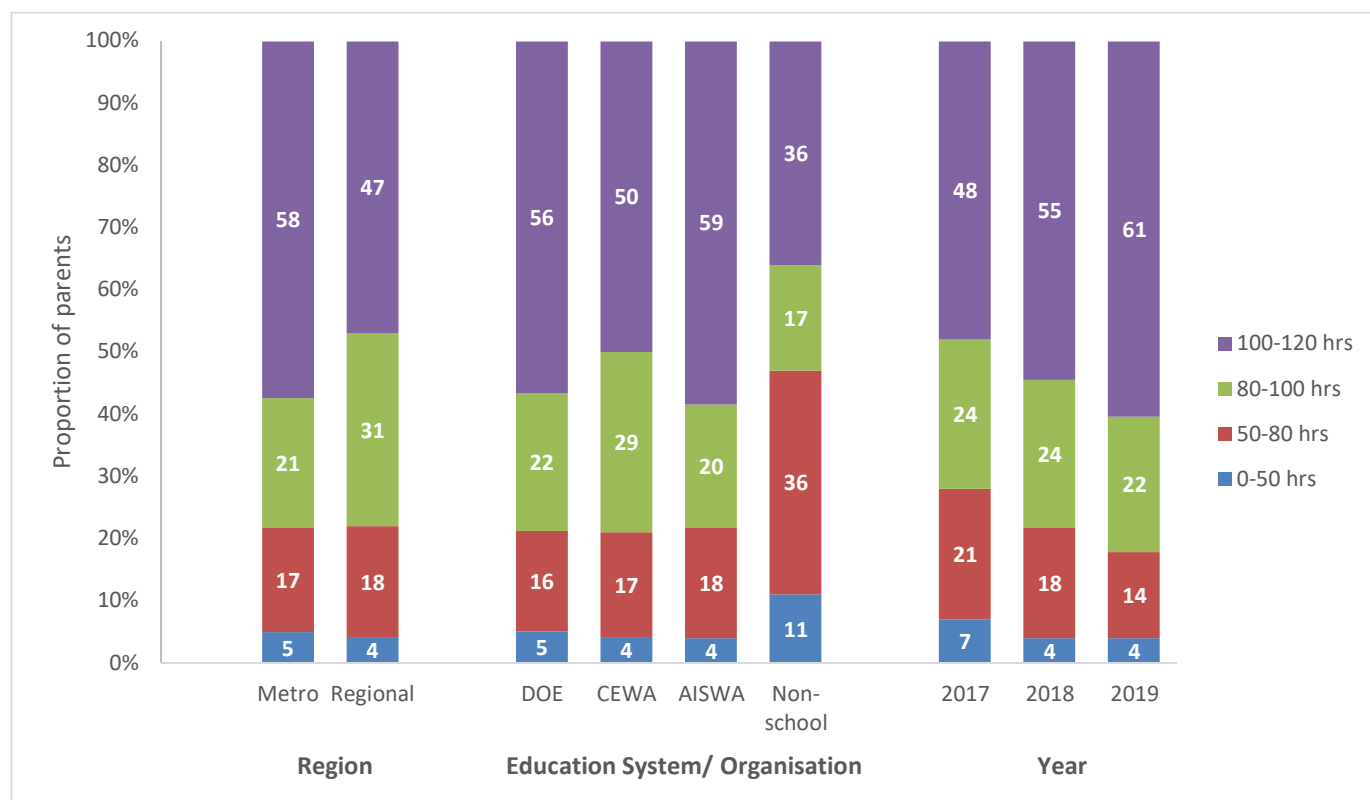
3.3.7.2 Students

Intended supervised driving hours of students were examined by region. As for parents/carers, while the proportion of students intending to complete 0–50 or 50–80 hours was similar in metropolitan and regional areas, a higher proportion of metropolitan students intended to complete 100–120 hours (49.0%) than regional students (35.5%) (Table 3.8, Figure 3.4). An independent samples Mann-Whitney U test showed a significant difference in responses with students who attended workshops in the metropolitan area intending to complete more supervised driving hours than regional students ($p<0.001$).

Intended supervised driving hours of students were examined by education system/organisation. Similar to the results for parents/carers, a lower proportion of students attending non-school venues intended to complete 80–100 or 100–120 hours (57.6%) than school students (71.7–76.0%) (Table 3.8, Figure 3.4). An independent samples Kruskal-Wallis test showed a significant difference by education system/organisation overall ($p<0.001$). Pairwise comparisons showed no significant differences in intended supervised driving hours between students at DoE, AISWA or CEWA schools ($p>0.05$). However, students at non-school venues intended to complete a significantly fewer hours than those at DoE schools ($p=0.010$) or AISWA schools ($p=0.005$). There was no significant difference between students at CEWA schools and non-school venues ($p=0.066$).

Intended supervised hours of students were examined by year. The proportion of students intending to complete 100–120 hours increased from 39.3% in 2017 to 46.3% in 2018 and 49.6% in 2019 (Table 3.8, Figure 3.4). The independent samples Jonckheere-Terpstra test for ordered alternatives showed a significant difference between years overall ($p<0.001$). Pairwise comparisons showed that the intended level of supervised driving hours for students was significantly higher in 2018 than 2017 ($p=0.012$) and in 2019 than 2017 ($p<0.001$), but no significant difference between 2018 and 2019 ($p=0.139$).

Table 3.8 Q5: I intend to do the following number of supervised driving hours while I'm learning to drive (students)

	Student responses (n=2127)								p-value
	0–50 h		50–80 h		80–100 h		100–120 h		
	N	%	N	%	N	%	N	%	
Region									
Metropolitan	56	4.0	339	21.0	418	25.9	789	49.0	<0.001 [a]
Regional	24	4.7	132	25.6	177	34.3	183	35.5	
System									
DoE	52	4.9	200	19.0	281	26.7	518	49.3	<0.001 [b]
CEWA	14	2.8	127	25.2	171	34.0	191	38.0	
AISWA	21	3.9	132	24.4	131	24.3	256	47.4	
Non-school venue	2	6.0	12	36.4	12	36.4	7	21.2	
Year									
2017	35	6.7	125	24.0	156	29.9	205	39.3	<0.001 [c]
2018	35	4.0	199	22.5	241	27.3	409	46.3	
2019	19	2.6	147	20.4	198	27.4	358	49.6	
Total	**89**	**4.2**	**471**	**22.1**	**595**	**28.0**	**972**	**45.7**	

a Mann-Whitney U test   b Kruskal-Wallis test   c Jonckheere-Terpstra test

Figure 3.4 Intended hours of supervised driving for students (n=2127)
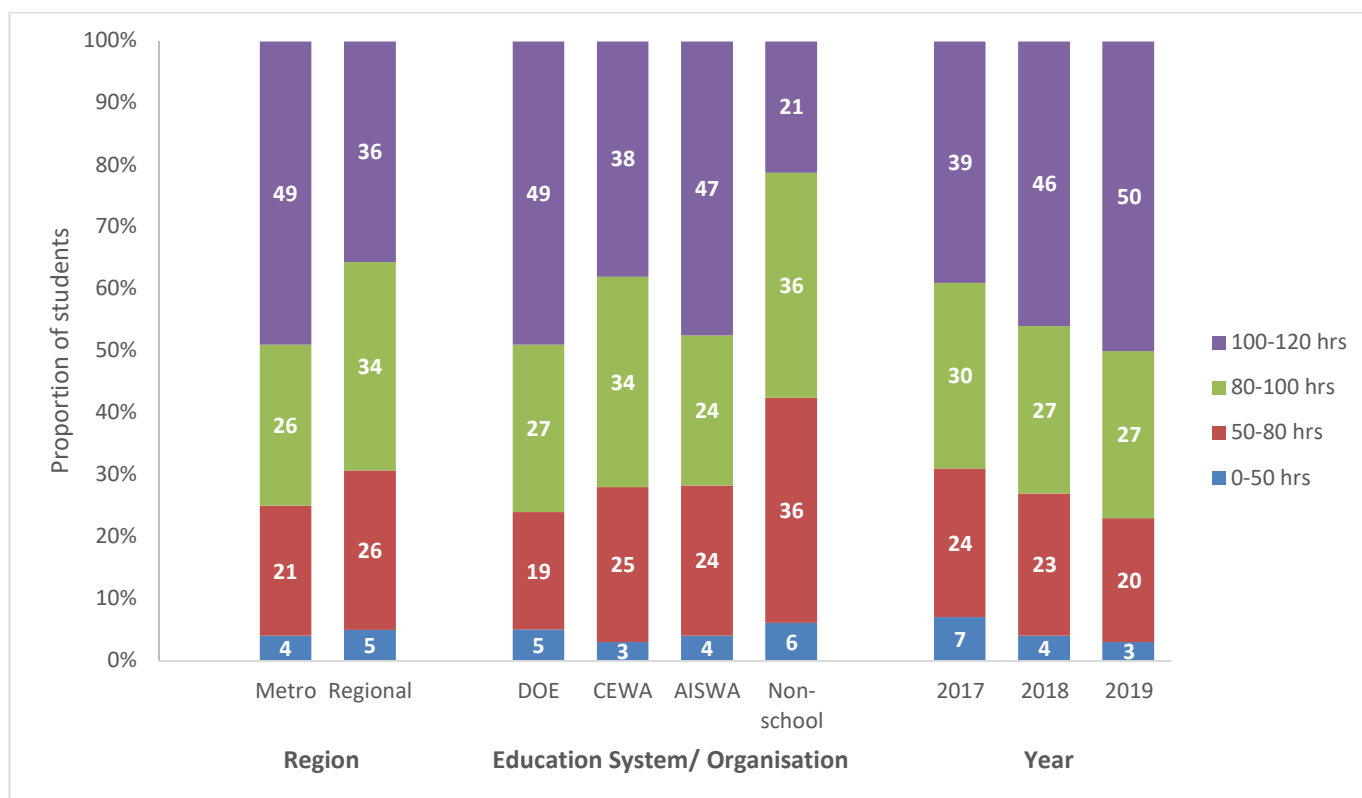
3.3.7.3 *Comparison of parents/carers and students*

Parents/carers and students were compared in terms of their intended hours of supervised driving using Mann-Whitney U tests (Table 3.9). Overall, parents/carers intended to complete significantly more supervised driving hours than students ($p<0.001$). A similar pattern was observed when examined by region. Regional parents/carers intended to complete significantly more supervised driving hours than regional students ($p<0.001$) and metropolitan parents/carers also intended to complete significantly more hours than metropolitan students ($p<0.001$).

Table 3.9 Comparison of intended hours of supervised driving for parents/carers and students

	Responses (n=2775 parents/ carers, 2127 students)								p-value [a]
	0–50 h		50–80 h		80–100 h		100–120 h		
	N	%	N	%	N	%	N	%	
All									
Parents	127	4.6	474	17.1	639	23.0	1535	55.3	<0.001
Students	89	4.2	471	22.1	595	28.0	972	45.7	
Regional									
Regional parents	25	3.8	119	18.2	202	30.9	307	47.0	<0.001
Regional students	24	4.7	132	25.6	177	34.3	183	35.5	
Metropolitan									
Metro parents	102	4.8	355	16.7	437	20.6	1228	57.9	<0.001
Metro students	65	4.0	339	21.0	418	25.9	789	49.0	

[a] Mann-Whitney U tests

3.3.8 Additional comments from parents/carers and students

Parents/carers and students were invited to make additional comments as part of the 2019 survey. A total of 165 parents/carers and 55 students made additional comments. A total of 148 of the parent/carer comments (89.7%) and 46 of the students' comments (83.6%) were positive or general comments. Examples include:

- Parent/carer: *'very informative, thank you'*
- Parent/carer: *'covered all questions and gives tips for supervisors'*
- Student: *'I found it informative and learnt a lot'*.

Only one parent (0.6%) and three students (5.4%) made negative comments:

- Parent/carer: *'Really just common-sense stuff. All the information from the book in talk form'*
- Student: *'Not very interesting'*
- Student: *'120 hours is pretty impractical'*
- Student: *The workshop was 'more for parents'.*

Sixteen parents/carers (9.7%) and seven students (12.7%) made suggestions for improving the workshop information or the sessions in general (

Table 3.10).

Table 3.10 Suggestions for improving Parent-Student Workshops

	Parents/carers	Students
Suggestions for more information		
Driving with a disability	2	1
Scooter licences	1	–
Rural driving	1	–
Reputable driving instructors	1	–
How demerit points are lost	1	–
Risk taking related to hormones	1	–
Getting manual licence when have an automatic car to practice on	1	–
Driving with cyclists on the road	1	–
Driver-parent – instructor examples	1	–
Young driver's safety in vehicle	1	–
How to drive on roundabouts	–	3
How to drive in the city	–	2
How to drive in wet weather	–	1
How to drive in different road conditions	–	1
How to drive safety on busy roads	–	1
Suggestions for session improvements		
Encourage parents to bring child to session	3	–
Hold the workshop at a later time of day	1	–
Better videos	1	1

3.3.9   Previous Parent-Student Workshop evaluations

In the 2008 evaluation, 118 students and 100 parents/carers completed paper-based surveys. Similarly, in 2015, 71 students and 96 parents/carers completed paper-based surveys at Parent-Student Workshops. The actual questions and responses used in the 2008, 2015 and current evaluations differed, but many of the same topics were covered. Table 3.11 summarises and compares the proportion of students and parents/carers who responded positively to each of the topics over the three evaluations. Overall, most responses were positive (88–100%) for both students and parents/carers.

For students, the proportion who responded positively to items addressing the benefits of supervised driving increased from 94% in 2008 to 100% in 2015 and the current evaluation. However, the proportion of parents/carers responding that they were more confident about supervising a learner driver after the workshop decreased slightly from 99% in 2008 to 96% in 2015 and 93% in the current evaluation.

For hours of supervised driving, 94% of students intended on doing more than 25 hours, being the minimum required for licensing at that time. By 2015, 50 supervised hours was the minimum required for licensing, and 89% of students intended to complete more than 50 hours. In the current evaluation, this proportion increased to 96%. Similar to students, the proportion of parents/carers intending to complete more than 50 hours of supervised driving increased from 88% in 2015 to 95% in the current evaluation. The proportion of students intending to complete more than 100 hours of supervised driving increased slightly from 42% in 2015 to 46% in the current evaluation. The proportion of parents/carers intending to complete more than 100 hours also increased from 44% in 2015 to 55% in the current evaluation.

Satisfaction with the workshop and willingness to recommend it and the program has remained high for both students (95–98%) and parents/carers (96–100%) over the three evaluations.

Table 3.11 Responses for the three Parent-Student Workshop evaluations

ITEM	2008	2015	Current
STUDENTS			
Benefits of supervised driving			
-I believe increasing the number of hours of supervised driving practice enhances the safety of a younger driver (*strongly agree* or *agree*)	94%		
-The more hours of supervised driving a learner does, the safer they will be (*agree* or *strongly agree*)		100%	
-I understand the benefits of supervised driving practice (*yes*)			100%
Hours of supervised driving			
-I intend to do more than 25 hours of supervised driving practice for my log book' (*agree* or *strongly agree*)	94%		
-How many hours of supervised driving do you intent to achieve and record in your log book? *(50-75, 75-100, 100 or more hrs)*		89%	
-I intend to do the following number of supervised driving hours while I'm learning to drive (*50-80, 80-100* or *100-120 hrs*)			96%
Recommend Keys4Life			
-How likely are you to recommend the Keys4Life <u>program</u> to other students (*quite likely, very likely* or *definitely likely*)		98%	
-I found tonight's <u>workshop</u> worthwhile and would recommend it to other people (*yes*)			95%
PARENTS/CARERS			
Confidence with supervised driving			
-Having attended the workshop I now feel more confident in assisting a learner driver with supervised driving practice (*agree* or *strongly agree*)	99%		
-I now feel more confident to supervise a learner driver (*agree* or *strongly agree*)		96%	
-I am more confident about teaching my son/daughter to drive as a result of this workshop (*yes*)			93%
Hours of supervised driving			
-How many hours of supervised driving do you intend to achieve with your learner driver (and record in the log book)? (*50–75, 75–100, 100+ h*)		88%	
-I intend to do the following number of supervised driving hours with my son/daughter (*50–80, 80–100* or *100–120 h*)			95%
Satisfaction with workshop			
-Satisfaction with Keys4Life Parent Workshop (*satisfied or strongly satisfied*)	96%		
-Overall, how satisfied were you with the Keys4Life Parent Workshop (*satisfied* or *strongly satisfied*)		100%	
-How likely are you to recommend the Keys4Life program to other parents? (*Quite likely, very likely* or *definitely likely*)		99%	
-I found tonight's workshop worthwhile and would recommend it to other people (*yes*)			98%

3.4   Discussion: Part B

Part B of the evaluation analysed nearly 5000 participant responses from Parent-Student Workshops. Overall, both parents/carers and students were positive, with positive responses to questions ranging from 93–100%.

The previous workshop evaluations also reported a high proportion of positive responses from attending parents/carers and students (Metrix Consulting, 2016; Office of Road Safety, 2009). It should be noted that the previous evaluations had much smaller sample sizes (n=167–218) than the current evaluation (n=2798 parents/carers and 2155 students). A comparison of the responses to the three evaluations found slight increases in the proportion of positive responses to most of the questions over time. This suggests that Parent-Student Workshop content continues to be useful and relevant. The large sample size of the current evaluation allowed responses to the questions to be examined by region, education system and year, which identified some significant differences.

Interestingly, significantly more parents/carers who attended workshops in regional than metropolitan areas and at CEWA than DoE or AISWA schools responded *'no/unsure'* to whether they were more confident about teaching their son/daughter to drive as a result of the workshop. Regional parents/carers may have less confidence due to the more challenging road environments, less access to varied driving conditions and higher road tolls in regional areas (Harrison & Seymour, 2003). It is also possible that the workshop may not be as tailored or relevant for regional as metropolitan parents/carers. The finding regarding CEWA parents/carers is most likely due to the higher proportion of CEWA parents/carers located in regional areas in this sample (37%) than DoE (26%) or AISWA (7%) parents/carers. A significantly lower proportion of parents/carers responded that they were more confident in 2019 than in 2017 or 2018, possibly because 2019 had more respondents from regional areas (36%) than the other years (15–17%).

A significantly higher proportion of metropolitan students responded *'no/unsure'* to whether they found the workshop worthwhile and would recommend it than regional students. The reasons for this should be explored, but it should be noted that the proportion of negative responses was still very low in both groups.

The workshop has a strong focus on encouraging parents/carers and students to complete more than the 50 hours of supervised driving required for licensing in WA. Since parents/carers are usually the main providers of supervised driving, the message about the benefits of more

extensive and varied driving practice under supervision must reach them (Senserrick & Haworth, 2005). A positive finding was that most parents/carers (95%) and students (96%) intended to complete more than 50 hours of supervised driving after attending the workshop.

For both parents/carers and students, those in metropolitan areas intended to complete significantly more supervised driving hours than those in regional areas. A previous study in regional NSW identified completing supervised driving hours as the most common barrier to obtaining a provisional licence (Hinchcliff et al., 2014). Reasons for this included difficulty finding a suitable supervisor, access to a vehicle, money for petrol and having nowhere appropriate to drive (Hinchcliff et al., 2014). Some regional families likely experience similar difficulties completing supervised driving hours in WA, which may explain the findings. Parents/carers attending workshops at CEWA schools and non-school venues and students attending non-school venues intended to complete significantly fewer supervised driving hours than those at DoE and AISWA schools. Again, the finding surrounding CEWA is likely due to the overrepresentation of regional participants at these schools. Those attending non-school venues may face similar difficulties achieving supervised driving hours as those in regional areas due to disadvantage. For both parents/carers and students, the intended level of supervised driving hours significantly increased from 2017 to 2019. This is a positive result and suggests that achieving more hours of supervised driving may be becoming more accepted and the norm by parents/carers and students.

Another finding was that parents/carers intended to complete more supervised driving hours than students, which was consistent for both metropolitan and regional participants. This is not unexpected as parents/carers are likely to focus on safety (Jewett, Shults, & Bhat, 2016), while teenagers are likely to focus on getting their licence quickly.

Overall, parents/carers and students attending the workshop responded positively, suggesting that the actual content of the workshop is useful and relevant to the target groups. During the learner driver period, active engagement by parents/carers reduces the crash risk of novice drivers (Curry et al., 2015). This highlights the importance of parental involvement in the Keys4Life program. Part A of this evaluation found that only 27% of schools hosted a Parent-Student Workshop in 2019. This suggests that more schools should be encouraged to host and more parents/carers to attend Parent-Student Workshops. This may require alternative delivery methods as parents/carers become increasingly busy and time-poor. The DoE are developing a short Keys4Life Parent-Student webinar in 2021 as an alternative for families who are either

time poor or live separately from their children (e.g. boarding school students) (Department of Education consultant, personal communication, March 25, 2021).

3.4.1 Recommendations

Recommendations from Part B of the evaluation are:

- Investigate whether parents/carers from regional areas have less confidence surrounding teaching their child to drive than metropolitan parents and examine whether Parent-Student Workshop content could be adapted to suit the needs of regional parent/carers.

- Explore alternative methods of delivering Parent-Student Workshops to reach more parents/carers (see Part A recommendation).

4 PART C: KEYS4LIFE TEACHER PROFESSIONAL DEVELOPMENT

4.1 Background: Part C

The Keys4Life PD (KFL PD) is a one-day professional learning program that teachers and educators must complete to become registered to deliver the program and administer the Learner's Permit Test. The KFL PD covers information about the WA licensing system, crash statistics, student completion of the *Behind the Wheel Student Journal*, delivery of the 10 lesson Keys4Life program and activities, best practice road safety education, road safety statistics, Keys4Life and other resources available and how to order them, engaging families and how to host a Parent-Student Workshop, road rules, student requirements to undertake the Learner's Permit Test, conduct of the Learner's Permit Theory Test, issuing of student certificates and forms of ID required for a Learner's Permit. An optional addition at metropolitan KFL PDs is the inclusion of a brief session where other stakeholders are invited to present at the PD, to briefly explain the complementary initiatives and services they provide for students. The objective of Part C is to:

- Analyse data from questionnaires completed by teachers who attended Keys4Life PD between July 2017 and March 2020.

4.2 Methods: Part C

4.2.1 Study design

This cross-sectional study examined the responses of school teachers and educators who completed the Keys4Life PD from July 2017 to March 2020, and are collectively be referred to as *'participants'*.

4.2.2 Data

The DoE provided a de-identified database of participant responses to researchers. After each KFL PD session, participants were asked to complete a short questionnaire containing five questions:

1. The workshop has extended my knowledge and understanding (*Yes/no*)
2. My confidence to implement road safety education strategies has increased (*Yes/no*)
3. I am satisfied with the workshop I attended   (*Yes/no*)
4. If you answered no to Questions 1–3 above, please provide further comment

5. We welcome any further comments about this workshop or about the (SDERA) program (e.g. support services, resources, website or professional learning opportunities).

4.2.3 Data analysis

The sample was described in terms of the location of the KFL PD (metropolitan, regional), year of the session (2017–2020), place of employment (school, agency or student teacher) and job position for school-based participants. It is important to note that KFL PD participants employed at regional schools/organisations may attend PD sessions in the metropolitan area. However, region could only be examined by the location of the PD session.

The responses to the three quantitative questions (Questions 1–3) were described using frequencies and percentages and examined in terms of region and place of employment. No further analyses were undertaken due to the high proportion of positive responses for each question.

The open-ended responses about the KFL PD were analysed using basic content analysis. Researchers read the comments, devised a coding frame to describe the thematic content of the comments, then assigned codes to the comments. Coded data was then grouped into categories and described.

4.3 Results: Part C

4.3.1 Sample

The sample comprised 1046 participants who attended the Keys4Life PD from July 2017 to March 2020 and completed the questionnaire. Not all attendees completed the questionnaire These participants attended 65 different KFL PD sessions. A total of 921 (88.0%) participants attended sessions held at a metropolitan location and 125 (12.0%) at a regional location (Table 4.1).

Table 4.1 Characteristics of the Keys4Life PD participants, 2017–2020

Characteristic	Frequency	Percent
KFL PD location		
Metropolitan	921	88.0
Regional	125	12.0
Year		
2017 (Jul-Dec)	217	20.7
2018	365	34.9
2019	337	32.2
2020 (Jan-Mar)	127	12.1
Place of employment		
School	734	70.2
DoE	*459*	*43.9*
CEWA	*114*	*10.9*
AISWA	*158*	*15.1*
Combination [a]	*3*	*0.3*
Student teacher	204	19.5
Agency	108	10.3
Position in school (n=734)		
Principal/Deputy Principal	8	1.1
Head of Department/Learning Area	51	6.9
Teacher	633	86.2
Teaching or Education Assistant	19	2.6
Student support services/pastoral care/health care	23	3.1

[a] Participants employed by more than one school system

A total of 217 (20.7%) attended sessions from July to December 2017, 365 (34.9%) in 2018, 337 (32.2%) in 2019 and 127 (12.1%) from January to March 2020. Most participants were employed in schools (n=734, 70.2%), 204 (19.5%) were student teachers, and 108 (10.3%) were employed by agencies. For those employed by schools (n=734), most were teachers (n=633, 86.2%), 51 (6.9%) were Heads of Department/Learning Area, 23 (3.1%) worked in student support services/pastoral care/health care, 19 (2.6%) were teaching or education assistants, and 8 (1.1%) were Principals or Deputy Principals (Table 4.1).

4.3.2 Keys4Life PD feedback

Most participants responded positively to the three questions about the Keys4Life PD (97.9–98.8%) (Table 4.2).

For Question 1, 97.9% (n=907) of participants responded that the KFL PD had extended their knowledge and understanding (Table 4.2). For the 19 participants who responded *'no'*, all attended KFL PD at metropolitan locations (100.0%), 12 were employed at schools (63.2%), and seven were student teachers (36.8%)

For Question 2, 98.7% (n=914) of participants responded that their confidence to implement road safety education strategies had increased (Table 4.2). For the 12 participants who responded *'no'*, all attended KFL PD at metropolitan locations (100.0%), six were employed at schools (50.0%), one at an agency (8.3%), and five were student teachers (41.7%).

For Question 3, 98.8% (n=915) of participants were satisfied with the KFL PD they attended (Table 4.2). For the 11 participants who responded *'no'*, 10 attended KFL PD at a metropolitan location (90.9%) and one at a regional location (9.1%), six were employed at schools (54.5%), one at an agency (9.1%), and four were student teachers (36.3%).

It is important to note that student teachers comprised less than 20% of the sample but represented 36–42% of the negative responses.

Table 4.2 Responses to questions about Keys4Life PD, 2017–2020 (n=926)

Questions	Frequency	Percent
The workshop has extended my knowledge and understanding		
No	19	2.1
Yes	907	97.9
My confidence to implement strategies has increased		
No	12	1.3
Yes	914	98.7
I am satisfied with the workshop I attended		
No	11	1.2
Yes	915	98.8

4.3.3 Keys4Life PD feedback: open responses

A total of 603 participants made additional comments (57.6%) as part of Questions 4 and 5, with several making multiple comments.

4.3.3.1 Positive responses

The KFL PD participants made 392 positive comments, which were mostly general positive comments about the overall quality of the KFL PD and the experience. Participants also made specific positive comments about the KFL PD activities, Keys4Life resources, presenters, stakeholder presentations, and the KFL PD structure. Examples include:

- *'Very informative and engaging'*
- *'A good balance of talk and activity'*
- *'Really built my confidence in the program and ways that I can implement in class'*
- *'The resource and indeed whole program is very well organised, supported, written and structured – appreciated by time poor educators'*
- *'Hands on and engaging activities which were conducted in a safe and friendly environment'*
- *'Actually doing the activities always is the best way for me to remember how to teach them, so this was great'*
- *'Clearly written, high quality resources'*
- *'Presenters kept the workshop moving and full of discussion and activities'*

- *'Presenters were very knowledgeable and facilitated engaging and interesting activities'*
- *'It was good to see how many external services schools can access to combine with teaching KFL course'*
- *'Well paced and relevant to the diverse range of participants'.*

4.3.3.2 Refresher course

Several participants who had previously completed the KFL PD commented that they did not learn anything new from attending again. Three suggested a half-day refresher course for teachers in this situation, with one suggesting that it be online.

4.3.3.3 Quality of presenter/facilitator

Several different presenters/facilitators ran the KFL PD sessions over the almost three-year period. While there were mostly positive comments about the presenter/facilitator, there were a small number of negative comments (n=5). Three of these were from the same KFL PD session.

4.3.3.4 Keys4Life PD material

Ten suggestions were made about additional material that could be distributed to participants at the KFL PD. Four suggested providing bags to take home the handouts/papers, and three suggested providing the KFL PD PowerPoint presentation, course resources and infographics/videos on a USB. Other suggestions were highlighters, clipboards, plastic folders and alcohol wipes for the activities using whiteboard markers.

4.3.3.5 Keys4Life PD facilities

KFL PD sessions were held at 28 locations over the study period; there were a small number of comments about the KFL PD facilities (n=11), including the lack of morning tea, wobbly tables, technical issues, lack of WiFi, last-minute room changes, need for an evacuation/safety announcement, the room being too small and that guest speakers should have their own venue rather than presenting in the same room at the same time.

4.3.3.6 Keys4Life PD length

The KFL PD is a full day course lasting approximately 6.5 hours. Seventeen participants commented about the length of the PD—16 suggested a shorter course and one suggested a two-day course. For example:

- *'Could be shortened. Would've been able to be covered in half a day instead of 6 hours it could be 3'.*

Specific suggestions for shortening the course included *'more concise delivery'* of content, less repetition, reduced time spent on the section about statistics and reduced time spent on (SDERA) and the Department of Transport.

4.3.3.7 *Keys4Life PD structure*

Fourteen comments related to the KFL PD structure; several suggested placing the content delivered at the end of the day (how to teach the Keys4Life program) in the morning with the information about Learner's Permit Test procedures and legal issues. Two participants suggested providing an overview or timetable of the day to participants in the morning.

4.3.3.8 *Keys4Life PD content*

The KFL e PD covers all aspects of the Keys4Life program. Thirty-four comments related to the KFL PD content, with 14 on how to teach the Keys4Life program, the 10 lessons and the activities contained within the lessons. All suggested more time and focus was needed on these components. Comments included:

- *'I found the workshop to be lacking in content in regards to how to teach the keys for life program'*
- *'Not enough detail on the 10 lessons and which activities are involved in each'*
- *'Only got through 7/10 activities and many instructions were confusing'*
- *'Force us to play the games and carry out the activities in the book so we can brainstorm ways to make it fit into our own classroom (rather than briefly summarise all 10 lessons)'*
- *'1 hr to do 10 wasn't enough time to read/understand and attempt each activity'.*

Thirteen comments suggested providing additional information in the KFL PD, including road rules, brake reaction activity, financial effect of losing your licence, process of gaining a licence in WA, safety of vulnerable road users including motorcyclists and bicyclists, and safer driving courses for young people. Several participants stated that they would like to receive more information on the administrative side of Keys4Life, including viewing Keys4Life electronic resources, instructions on how to navigate the Keys4Life website, examples of the process of the Learner's Permit Test and how to create an attendance register.

Five participants commented that some of the KFL PD content was repetitive or unnecessary, for example:

- *'As this session was catered to teachers there need to be less time spent on explaining teaching pedagogies'.*

One participant suggested that teachers and prison workers should attend separate KFL PD sessions since their students' needs are different.

4.3.3.9 Keys4Life resources

The Keys4Life program produces numerous free resources for teachers and students. The Keys4Life Teacher Resource contains 10 lessons that cover the Keys4Life course (Department of Education Western Australia 2020). A hard copy is distributed to teachers at the KFL e PD session. Student resources include the *Behind the Wheel Student Journal*, Let's Practise booklet, Learner's Permit Theory Test, Drive Safe Handbook, and Student Workbook; hard copies of most of these can be ordered online. The *Behind the Wheel Student Journal* is also available in writable PDF.

Most comments about resources were positive, with 30 suggestions for improvement. Three comments suggested developing a *Behind the Wheel Journal* app so that it is *'easy for students to access it via phone or tablet'*. Four comments suggested that the information provided at the KFL PD and student resources is made available electronically but offline (e.g. on USB) and compatible with Mac and PC. There were two comments about the student workbooks: *'the designs on the pages are too distracting and not visually pleasing'* and *'the length of wording for activities in workbooks take a bit to get your head around what it is you have to do'*. Some suggested that they would like to buy the pre-made activity resources shown at the KFL PD.

Another issue raised was the need to adapt the Keys4Life program and resources for students of different cultures, those who do not have English as their first language, disengaged youth, and those with different learning styles and abilities. Examples of the six comments include:

- *'Big adaptations are needed for culturally different students, and those for whom English is an additional language (especially Behind the Wheel, which is hugely challenging for students who are not in standard Australian families)'*
    '... we have disengaged students who would likely struggle with the text density of the Keys4Life program'.

4.4 Discussion: Part C

This is the first published evaluation of the Keys4Life program PD. This evaluation included 1046 participants and found that the KFL PD was extremely effective at extending knowledge and understanding and increasing confidence to implement road education strategies, with 98–99% of participants responding positively to these survey items. Satisfaction with the KFL PD was extremely high (99%). The 2015 Keys4Life evaluation also conducted an online survey of 281 teachers, with 98% reporting that they were satisfied with the KFL PD.

Interestingly, students studying to become teachers were overrepresented in the negative responses, comprising less than 20% of the sample but 36–42% of the negative responses. One of the 2015 evaluation recommendations was to target undergraduate teachers to broaden the reach of qualified teachers (Metrix Consulting, 2016). While this was implemented for a short time, student teachers no longer participate in the full KFL PD. Pre-service teachers now receive a simpler version of the KFL PD with less materials, resulting in an *'interim Keys4Life registration'*. In order to receive a *'full Keys4Life registration'* after they receive their teaching qualification, they are required to complete the full KFL PD. (Department of Education consultant, personal communication, January 25, 2021).

The open responses from participants were also positive, especially in terms of KFL PD activities and program resources. Overall, the findings of the evaluation suggest that no major modifications are required for the KFL PD. However, participants made several suggestions for minor improvements. For example, some participants suggested a Keys4Life refresher course for teachers who had previously completed the PD. The DoE is currently developing an online refresher course—which will be compulsory for teachers delivering Keys4Life to complete—for implementation in late 2021/early 2022 (Department of Education consultant, personal communication, December 10, 2020).

Other suggestions included providing additional useful items at the KFL PD. Specifically, the DoE could consider providing the PD PowerPoint presentations, electronic course resources and infographics/videos to participants on a USB and in versions compatible with Mac and PC.

Several participants commented on the length, structure and content of the KFL PD; particularly the need for more time and focus on how to teach the Keys4Life program, the 10 lessons and the activities contained within the lessons. Others suggested including other information in the PD, such as road rules and vulnerable road user safety. As the KFL PD is already a full day course, the DoE could consider reviewing the PD structure and time spent

on each component. It should be noted that the KFL PD was re-structured in 2019 (Department of Education consultant, personal communication, December 10, 2020) so this may not be necessary. Supplementary information that could not be covered during the KFL PD could be made available to participants online or on a USB.

Another suggestion was developing an app version of one of the Keys4Life resources, the *Behind the Wheel Journal*. This is a compulsory journal that Keys4Life students must complete at home before sitting the Learner's Permit Theory Test. It is currently available in hardcopy or as a writable PDF. However, the PDF is not suitable for hand-held devices. The DoE could investigate the possibility of developing a *Behind the Wheel Journal* app so that students could complete the journal on a device.

Finally, some participants stated that the Keys4Life program and student resources should be adapted for those who do not have English as their first language, disengaged youth, and those with different learning styles and abilities. The DoE is in the process of developing a new student workbook that is more culturally inclusive and appropriate for disadvantaged students and those with literacy/learning/language support needs. They will seek support from the relevant DOE branches and teachers when developing this material. The Teacher Resource will also be rewritten between 2021 and 2023 to make it more culturally responsive (Department of Education consultant, personal communication, December 10, 2020).

4.4.1   Recommendations

Based on the responses from the KFL PD participants and information provided by the DoE about changes to the program that are currently in progress, we have made three minor recommendations from Part C of the evaluation:

1. Consider providing the Keys4Life PD PowerPoint presentations, electronic course resources, infographics/videos, and supplementary information to KFL PD participants on a USB, in a format compatible with Mac and PC.

2. Review the structure of the Keys4Life PD and time spent on each component.

3. Investigate the possibility of developing a *Behind the Wheel Journal* app that students could complete on android or Apple devices.

5 PART D: STAKEHOLDER AND DOE CONSULTANT INTERVIEWS

5.1 Background: Part D

The DoE regional and metropolitan consultants are based in 12 locations across WA (Perth and 11 regional areas). Their role in the Keys4Life program is to train and engage teachers and educators to implement Keys4Life and deliver Parent-Student Workshops. The DoE metropolitan consultants also provide overall administration of the program including development of resources and professional learning programs, support and supervision of DoE regional consultants (in relation to the Keys4Life program), management of resource stocks, reporting to and liaison with key stakeholders, ongoing monitoring and review of the program, and development of program and system improvements. The metropolitan DoE consultants maintain close links with several road safety stakeholders in WA through the WA Road Safety Education Committee (WARSEC). Representatives from several of these stakeholder organisations are invited to a short session during the metropolitan KFL PDs, where they provide teachers with a brief overview about the initiatives and services they provide to schools, that complement and reinforce messages raised during Keys4Life lessons. This information is presented as an option that teachers can choose to utilise. The objective of Part D is to:

- Conduct in-depth interviews with DoE consultants and stakeholders involved in the Keys4Life program.

5.2 Methods: Part D

5.2.1 Study design

Part D comprised a qualitative study using semi-structured phone interviews.

5.2.2 Participants

The researchers recruited potential participants by email invitation. The DoE provided the email addresses of all DoE consultants as well as stakeholder contacts to the researchers. The email invitation contained a link to an online Participant Information Form and consent form developed using Qualtrics. Those who consented to participate were contacted to set up a convenient time for an interview. Fourteen DoE consultants (13 consultants and one project officer) were invited to participate, and all agreed. A total of 12 representatives of stakeholder organisations were invited to participate, and all agreed.

5.2.3 Data collection and discussion topics

The semi-structured in-depth interviews were conducted by telephone and ranged from 27 to 71 minutes for the DoE consultants and 13 to 63 minutes for stakeholders. Interviews were conducted by an experienced qualitative researcher using separate discussion guides for the DoE consultants and stakeholders (Appendix 1). The two discussion guides comprised several open-ended questions and participants were invited to elaborate on their responses. Discussion topics focused on the role of the participant, relationships and satisfaction with the DoE's Keys4Life program, positives of the program, barriers, and areas for improvement. All interviews were recorded with a digital recorder and transcribed by Transcription Australia.

5.2.4 Qualitative analysis

The qualitative thematic data analysis method described by Green et al. was undertaken (Green et al., 2007). This method involves immersion in the data with rereading, coding, categorisation and aggregation of identified themes. Preliminary coding was carried out by an independent qualitative coder using NVivo 12 for data management. Coded data was grouped into themes and discussions within the research team were undertaken to refine themes and triangulate stakeholder and consultant interviews. Interviews were then re-read and manually coded by a team member to ensure that views were fully captured. The team then met to refine and reach agreement on the themes. The final themes were: (1) perceptions of Keys4Life, (2) principles of Keys4Life, (3) engagement in Keys4Life, (4) communication and relationships, (5) additional benefits of Keys4Life, (6) challenges/barriers for Keys4Life and (7) suggestions for new initiatives/improvements.

5.3 Results: Part D

5.3.1 Sample

The 14 DoE consultants represented the following 12 regions (relevant full time equivalent (FTE) employment status provided for each position):

- Perth Metropolitan area (1.8 FTE)
- Wheatbelt South (Narrogin area) (0.5 FTE)
- Wheatbelt North (Northam area) (1.0 FTE)
- Pilbara (1.0 FTE)
- South West (Bunbury area) (0.8 FTE)
- South West (Esperance area) (0.6 FTE)
- South West (Albany area) (0.4 FTE)
- South West (Warren Blackwood/Vasse) (0.8 FTE)
- Goldfields (1.0 FTE)
- Midwest (0.8 FTE)
- Kimberley (1.0 FTE)
- Peel (1.0 FTE)

The 12 stakeholders represented the following 10 organisations:

- Public Transport Authority (PTA) – Right Track Program
- Paraplegic Benefit Fund (PBF)
- Royal Automobile Club (RAC)
- Road Safety Commission (RSC)
- Department of Transport (DoT)
- St John Ambulance
- Royal Perth Hospital – PARTY (Prevent Alcohol and Risk-related Trauma in Youth) Program
- Injury Matters – Road Trauma Support WA
- Road Wise – Western Australia Local Government Authority (WALGA)
- Legal Aid WA

In the results, DoE consultants are denoted as C1, C2…C14 and stakeholder representatives as S1, S2 … S12.

5.3.2 Perceptions of Keys4Life

There was an overall positive response from both DoE consultants and stakeholders when asked how they felt about the role of the Keys4Life program in road safety education. The

consensus was that it was a *'very good'* program. Participants stated that it was *'necessary'*, *'valuable'*, *'engaging'*, *'relevant'*, *'well-received'* and *'popular'*. One stakeholder described the role of (SDERA) and the Keys4Life program as *'the voice of road safety education in schools'*. (S9)

In terms of the Keys4Life content, participants said that it was *'fantastic'*, *'well-written'*, *'comprehensive'*, *'relevant'*, *'evidence-based'* and *'informed'*. The program was also considered *'accessible'*, *'adaptable'*, *'engaging'* and *'sustainable'*. The Keys4Life program is not compulsory; however, several participants felt that the program should be embedded within the school curriculum and, therefore, compulsory. Table 5.1 summarises the perceptions of the DoE consultants and stakeholders on the Keys4Life program.

Table 5.1 Perceptions of Keys4Life: responses from participants

'I think it's popular with teachers and students… my impression is that it's still a valuable and well-received component of the SDERA program and Road Safety in general' (S10)	*'It's very well-received. It's a very, very popular program. I think it's demonstrated by how many schools continue to run it year after year because it gets high student engagement because there's a purpose'* (C9)
'I think it's great…I think the content is really good' (S9)	*'Well all of our high schools love doing it but it's been really embraced by some of the students at ….school, some of our CARE schools, which are our independent schools because it's so engaging'* (C9)
'Heard it's a very good and successful program – lots of training sessions, lots of trained teachers and good numbers' (S3)	*'I think they love the resource. They love the program. And they are keen to teach to the kids because it's relevant to them … and the kids like it'* (C13)
'I think Keys4Life is a really important, valuable part of the overall Road Safety' (S11)	*'Never had any issues with KFL…definitely most successful program…really good job'* (S4)
'Valuable, get a lot out of it… pleased to be involved…. want to continue in the future' (S1)	*'We were just going through the book. She said, 'It's an awesome activity. You can get the kids totally engaged'* (C8)
'I think the resources are fantastic' (C2)	*'Valuable.. good.. want to continue, really good job, most successful, no issues'* (S5)
'Normally it's very, very popular, and the feedback… The feedback seems really positive' (C10)	*'Well-written. Whenever we do any professional learning, everyone finds them easy to do, relevant for the kids and with up to date information and statistics'* (C9)

5.3.3 Principles of Keys4Life

Participants also thought highly of the principles that underpin the Keys4Life program. Several participants supported the *'best practice'* approach of the program with one stakeholder stating:

'... *the main benefits are being able to go to, if you like, the accepted best practice providers of road safety education content'*. (S12)

The Keys4Life program is aligned with the *'Principles for School Road Safety Education'* (Saunders & Miller, 2009). These 16 Principles provide a framework of core concepts and values to guide the planning, implementation and review of road safety education programs, policies and practice in school communities (Saunders & Miller, 2009). Keys4Life also incorporates the *'whole school approach'* (SDERA, 2020b) involving all members of the school community, students, staff, parents/carers and other community members. The approach advocates that learning occurs not only through formal curriculum, but also through students' daily experience of life in the school and beyond. One consultant commented:

'...*So it's very relevant and it links into more of a big-picture education program where they can actually see a reason for why we're doing it'*. (C9)

The *'whole school approach'* also requires schools to address the health and wellbeing of their staff, students, parents/carers and the wider community through three key components working in unison to achieve improved health and wellbeing outcomes: curriculum, ethos and environment, partnerships and community links (SDERA, 2020b). As one consultant suggested:

'*We look at the triangle – we look at the kid, we look at the school they're in, and look at the parents as part of the community'*. (C8)

5.3.4 Engagement in Keys4Life

The Keys4Life program incorporates various teaching and learning resources, with implementation guidelines and processes for teachers, students and parents, which are freely available online or in hard copy via an online order form. Overall, comments from both stakeholders and consultants about the program resources were positive and reported to be *'adaptable'*, *'accessible'* and *'engaging'* for students. The Keys4Life program offers some flexibility in the delivery, depending on the mode of learning and teaching at schools and agencies. One participant described this as:

'*different forms of learning within the Keys4life program...there's game(s), there's videos, there's written, there's group discussion, there's guest speakers'*. (S10)

Another participant stated:

'... *it offers lots of alternatives, it offers lots of different ways of doing it'*. (C9)

The consultants noted that teachers/facilitators are skilled in adapting the teaching and learning resources to suit their particular class environment. They reported that, in general, teachers found the various learning activities and materials engaging for their students. In addition, the incentive for students to receive their Learner's Permit was motivating for students to engage with the program. As one participant stated:

'I think it is engaging for students and I think at year 10, it's a really receptive audience because, by and large, kids want to get their driver's licence and I think they're quite receptive to the content of Keys4Life'. (C11)

In terms of road safety knowledge and behaviour sustainability, stakeholders and consultants felt that the program's delivery through regular, multiple sessions helped with longer term reinforcement of road safety. One participant stated:

'Students who have gone through a one-off thing, they don't really understand really what it's about and that's not unusual for teenagers if they just get taught something once. But happening over a number of weeks…to give them an opportunity to revisit it and revisit it again, see it from a different angle'. (S10)

Another participant said:

'I think it's a really good program that's sustainable in schools and that's what you want. You don't want it to be a one-off, you want it to be running for a number of years'. (C9)

5.3.5 Communication and relationships

The overall comments concerning the communication between Keys4Life staff from both head office and regionally and stakeholders were positive. The consultants and stakeholders felt that they had a good working relationship with head office, where staff were very *'approachable'*, *'responsive'* and *'supportive'* when contacted regarding further information or discussing any issues that arose. Staff at head office were also *'timely'* responding to emails and phone calls.

The stakeholders who attended and presented at the Keys4Life PD sessions held in metropolitan locations felt their contribution was a valued part of the program while providing reciprocal networking opportunities. Currently, stakeholders do not attend the KFL PD sessions held in regional areas. Stakeholder organisations with representation in regional areas suggested that their staff could participate in the regional PD sessions, noting that staffing resources are somewhat limited in regional areas. However, stakeholders were keen to support and build relationships where possible at schools, agencies or planned community road safety

weeks in regional locations to help address any inequities between regional and metropolitan areas. Table 5.2 contains statements from participants on communications and relationships related to Keys4Life.

Table 5.2 Communication and relationships: responses from participants

'We've developed, actually, quite a strong working relationship…We're always touching base… SDERA has welcomed our staff being there to answer questions that perhaps they are unable to answer, and it's been really good' (S8)	*'...more than comfortable and confident with quality of relationships'* (S3)
'There's a close connection there…I've always gone to SDERA to ask for their advice and understanding' (S12)	*'I've never had any issues with having problems solved or anything like that. The systems that we have in place seem to work really well for me'* (C5)
'We've had a working relationship for a long time, so I'm really comfortable to get on the phone and talk to them' (S11)	*'We've always had regional consultants, so working remotely hasn't been a big thing for them because they've always been working remotely. So communication is important. We have regular meetings, teleconferences, where you can share and hear what other people are doing'* (C9)
'very good' communication *'proactive regional officers'* (S5)	SDERA are *'... quite proactive in getting the information there and the information about it is very informative and detailed'* (C12)

5.3.6   Additional benefits of Keys4Life

The DoE consultants also noted several benefits beyond the specific Keys4Life outcomes, including improved school attendance and obtaining a birth certificate. Consultants stated that in some schools and agencies, student participation in Keys4Life, with the provision to pass the Learner's Permit Theory Test, was an incentive to attend school. One consultant commented that Keys4Life has:

> *'…really good engagement because it's a bit of a carrot for students to – for engagement for kids that have low engagement at school, low attendance, and all of those things'.* (C6)

Also:

> *'I think Keys4Life is a really good program for … students because it counts towards their WACE (Western Australian Certificate of Education)'.* (C6)

Some community/agency organisations have expanded the Keys4Life program to provide individuals with access to a nominated supervisor driver and car within a community to help

them to achieve their 50 hours of compulsory supervised driving after receiving their Learner's Permit. One regional consultant stated:

> '*road safety ... is a reality especially around seatbelts and higher representation of Indigenous people included in the statistics of road trauma. And I think that whenever I run the PD with staff we certainly look at our statistics ... and obviously, it kind of hits home a little bit for them... we're teaching these because it is important, because Indigenous people are overrepresented...*' (C6)

Consultants also noted that some Indigenous students did not have a birth certificate, which is necessary for the next step after passing the Learner's Permit test. One consultant worked closely with agency staff to prepare the documentation required to apply for a birth certificate. Furthermore, another consultant reported that in one remote school, the students can access driving instructors and vehicles to assist them with their supervised hours once they have completed the Keys 4Life program and gained their Learner's Permit.

5.3.7   Challenges/barriers for Keys4Life

Participants reported some challenges/barriers for the Keys4Life program.

5.3.7.1   *Engagement with Keys4Life*

Participants were asked their views on why some schools chose not to participate or continue with the Keys4Life program. '*Conflicting priorities*' was one reason why schools chose not to be involved. One of the participants stated that:

> '*there is so much accountability around literacy and numeracy in schools...I think schools are that focused on those two areas that it often doesn't leave any time for professional learning in drug education or road safety*'. (C6)

Other reasons for not engaging with the program included smaller numbers of student cohorts in regional and remote areas. As one consultant stated:

> '*there've mainly been one or two year 10 students there and that's been a little bit harder to try and engage with the staff to get the program implemented being that it's just a small cohort*'. (C12)

5.3.7.2   *Decreasing number of Parent-Student Workshops*

Consultants also raised some concerns with the decreasing number of Parent-Student Workshops. However, particularly in regional areas, consultants described working creatively

to provide a flexible delivery mode of the workshop. For example, several consultants have included Parent-Student Workshops in another school event that parents/carers attend. For example, *'tagging it … when they do parent interviews'*. One regional consultant stated:

> *'I run it on a Year 10 night …they have parents there attending because they're really interested about what their son or daughter is going to do – what subjects they're going to do in year 11 and 12…So I get in as the first speaker there's maybe 250 people there'.* (C4)

Another example:

> *'… few times where we've made on the same day and so a parent night…where the parents are already there… Rather than have people coming to the school twice, they're already on site offering all that and talking to experts'.* (C12)

Another consultant mentioned an alternative approach where they created a parent information sheet that students could give to their parents. This approach allowed the parents to read the content at a suitable time and at their own pace.

5.3.7.3 *Qualification requirements to administer Learner's Permit Theory Test*

Keys4Life now requires facilitators to have a teaching qualification or a Certificate IV in Training and Assessment to administer the Learner's Permit Test. This new policy was introduced by the Department of Transport in 2019 and implemented in 2020. While some consultants acknowledged that this change was important to maintain the integrity of the Keys4Life program, it was cited as a barrier for some agencies where Keys4Life facilitators do not have the required qualifications. One consultant stated:

> *'the thing that they can't run if they don't have Cert IV in Assessment and Training is actually the test component and that's a big thing for … because we have vulnerable families, vulnerable people who don't want to go to the Department of Transport and actually sit and do the test'.* (C5)

In some instances, the consultants have supported the agencies to supervise the test component for their students. As one consultant explained:

> *'There was an agency that didn't have anybody in the agency that could actually supervise the tests, but they were all capable of coming and doing a workshop and learning how to deliver Keys Life. I had to go in and plead their case and offer to actually*

be the person that went and supervised the test – and that's something I can do. I can step in and supervise the test'. (C3)

However, other consultants noted that this was not always possible due to time and distance constraints. Some consultants felt that some agencies were reluctantly withdrawing from Keys4Life since the introduction of the new requirements.

5.3.7.4 *Cultural and regional context in resources*

In general, the Keys4Life resources were well-received; however, a common concern was the lack of cultural and context-appropriate content. It was also felt that the language was *'difficult', 'text-heavy'* or *'unsuitable'* for some students who had English as a second language. Further exploration revealed that consultants felt that teachers/facilitators were confident with adapting the language to suit their particular audience, but they would welcome more culturally appropriate content, including scenarios. One participant also described the content as too *'metro-centric'*. It was suggested that there should be more information relevant to regions; for example, information on *'survival skills'* with a car breakdown on regional and remote roads and *'sharing the road'* with heavy transport haulage, piloted vehicles, caravans and wildlife. Table 5.3 summarises participant responses regarding Keys4Life resources.

Table 5.3 Keys4Life resources: responses from participants

'A lot of the students are low-literacy in English because they may speak five different languages from their lands, and a lot of the Keys4Life literature is at the level of literature is too hard for the people' (C7)	*'The resources are not suitable for all. Some of the feedback I've had is that they are very text heavy, particularly for low literacy learners… Ed support centres – they would run Keys4Life over the whole year. And they've pretty much rewritten Keys4Life to suit their students'* (C4)
'the resources are very city based, it's not country based, so when we're looking at sort of things like that, you're looking at streetlights and roundabouts, the buildings themselves, whereas in the remote areas, you don't have anything, you've got camels and eagles and horses and dingos to worry about. So even the sign posting align is a huge difference' (C7)	*'I don't think everything is covered and resourced, like, especially the dangers in remote communities and it's not really looking at it from their point of view'* (C2)
'Two big factors outside of the metro area are heavy haulage… and the other is the caravan… there needs to be a focus on those two areas … because even if you live in the metropolitan area, you might decide to go to Exmouth for a week. So, you're going to be sharing the road with those sorts of vehicles' (C3)	*I think we need to have some more information about sharing the road with heavy vehicles like trucks…We need to include that in there because I don't think we cover enough of that or have enough of that information available for teachers to cover off'* (C10)

5.3.7.5 *Rural/regional challenges*

While some of the challenges relating to the implementation of Keys4Life outlined above may apply to both metropolitan and regional areas, several unique challenges for regional areas were raised by participants. Previously mentioned challenges that particularly affect regional areas include small cohorts of students, lack of appropriately qualified staff within agencies to administer the test to students and lack of culturally appropriate resources. Another challenge mentioned for regional schools was the high turnover of staff and Keys4Life teachers from one year to the next. As one consultant explained:

> *'I trained a guy there last year, but once again, you can train them for a year sometimes and then they'll put someone else into the job, so you start training again… that's an issue in smaller district high schools'.* (C8)

Another issue raised was that consultants often travel considerable distances when visiting schools and agencies in regional towns and communities. While the tyranny of distance is generally acknowledged, regional consultants often felt they were continuously juggling their time and budgetary requirements, resulting in some restrictions in providing training opportunities and visiting towns and communities within the region. As one regional consultant reported:

> *'We were severely restricted with the budget and emphasis was to remain within the budget so some regional consultants were unable to offer as many training opportunities as we would have wished. Our budget needed to cover catering, travel and accommodation for presenter and participants, teacher relief and venue hire'.* (C3)

Finally, consultants noted that some regional and remote communities either lack or have an unreliable internet connection, affecting the quality of the online KFL PD webinar delivered by regional consultants and the capacity for participant interaction, particularly in more remote locations.

5.3.7.6 *COVID-19*

The DoE consultants commented that the COVID-19 pandemic in 2020 was challenging. Interestingly, however, several participants mentioned that challenges turned into opportunities to progress and promote alternate ways of working. It was noted that staff *'rallied together'* to ensure that all teaching materials were available online for teachers to access and for KFL PD sessions to continue. The online resources were generally well-received and introduced staff to

an alternate way for consultants to provide training and support teachers and facilitators. For example:

> *'there has been a lot of resources and provisions put in place to help teachers to continue the program delivery on an online format if that's the way that they're required to do it'.* (C12)

Another consultant remarked:

> *'now we are running sessions remotely, so through webinars or MS Teams (online system). One of the … consultants has recently run one for Cocos Island and then we're running one …Christmas Island shortly'.* (C9)

The Perth-based consultants also reported that, during the COVID-19 shutdown, they worked closely with school staff in the Pilbara region (where there is currently no regional consultant). They conducted flexible online KFL PD for teachers at several schools to ensure that teachers were trained and ready to deliver the Keys4Life program when schools resumed.

In another region, when schools were closed, the consultant delivered online professional learning for school principals in quarantine, prior to them returning to the schools in remote communities.

5.3.8 Suggestions for new initiatives/improvements

Participants made several suggestions to increase the Keys4Life profile, broaden the reach, and ensure the program's integrity throughout the state, which are outlined below.

5.3.8.1 *Refresher training for teachers*

Most consultants commented on the need for compulsory and regular refresher training for teachers who deliver the Keys4Life program to ensure all teachers are updated with the latest road safety policies, protocols and guidelines. As one participant commented:

> *'Ensuring that staff who are implementing this program are up to date and they're not someone who just got their qualification over 10 years ago where there's been quite significant changes between then and now. So that's the thing I would like to see having – as having an expiry date on your qualification and the need to requalify…'* (C12)

Another consultant also commented:

> '... if you've had a break from it and you haven't taught it consistently for three years or two years in a row, you should come back and do a refresher as well too, because in that time, things like certificates changed'. (C3)

5.3.8.2 Reach of stakeholder information

Stakeholders also suggested ways to increase the reach of the information they provide as part of the KFL PD. One suggestion was to develop a short video of each stakeholder organisation's presentation. The video, with links and contact details, could be disseminated to all consultants to use at the regional KFL PD sessions. It could also be included at the metropolitan workshops when stakeholders were unable to attend.

As one stakeholder suggested:

> 'It could be an option to do a video recording of the session... and if for whatever reason we couldn't physically attend; they would have a video recording to run'. (S7)

Another suggestion from stakeholders that participate in the round-robin session at the KFL PD was to investigate the possibility of an *'annual networking session'* between participating stakeholders to update and increase their knowledge of each other's role in road safety education.

The participants noted the need to build stronger relationships between Keys4Life schools, parents and local relevant community groups in regional areas. While there are fewer/limited stakeholder organisations focusing on road safety in regional areas, particularly in smaller towns and communities; stakeholders expressed that they are keen to engage with regional communities to support both consultants and teachers, where possible, and to reinforce road safety education messages. One stakeholder commented:

> 'If we could be given a schedule ahead of time as to where those regional workshops will be held, we could likely schedule our compliance audit with those so that the guys could attend them'. (S8)

Another stakeholder suggested involving local road safety committees in supporting Parent-Student Workshops:

> 'I think there is an opportunity to leverage some of that enthusiasm from those local committees, local groups ... with the parent workshop'. (S11)

5.3.8.3   *Keys4Life Parent-Student Workshops*

The Keys4Life Parent-Student Workshops historically are delivered in a one-hour face-to-face workshop, usually on a weeknight. Several consultants reported they had developed flexible models of delivering Parent-Student Workshops (see Section 5.3.7.2) to meet the parents' needs in their region. Suggestions for further increasing parental involvement in Keys4Life included developing an *'online presentation'* for parents and a *'podcast'* or something similar, allowing parents to listen or view at a time convenient for them.

5.4 Discussion: Part D

Part D involved interviews with DoE consultants and stakeholders about the Keys4Life program. Overall, both participant groups offered positive comments on the Keys4Life program, including its value, principles and content. They also praised the Keys4Life resources and communication and relationships with the DoE. Stakeholders were happy with their role in the program. These findings support those of the two previous evaluations (Metrix Consulting, 2016; Office of Road Safety, 2009).

The participants reported some challenges or barriers for the Keys4Life program, particularly in regional areas. The second phase of this evaluation will further explore the barriers in regional areas through surveys of Principals/Leaders of schools that do not implement Keys4Life as well as agency teachers and students. Several consultants identified the lack of cultural and regional specific content in the Keys4Life resources as a challenge/barrier. DoE staff are working closely with the DoE's Aboriginal Education Teaching and Learning Branch (at Statewide Services) and key regional consultants to develop new culturally appropriate Keys4Life resources. These are expected to be completed by 2023 (Department of Education consultant, personal communication, December 10, 2020). When the new resources are rolled out and promoted, there will likely be increased uptake of Keys4Life in regional areas and among agencies dealing with disadvantaged youth.

Another commonly raised issue was the recent policy changes to qualification requirements for administering the Learner's Permit Theory Test. While this is positive for maintaining the program's integrity, it may also impact the ability of some agencies (particularly in regional areas) to implement Keys4Life. Since agencies frequently deliver the program to disadvantaged students who may be unable to access Keys4Life elsewhere, it is important to seek solutions to this issue.

While the COVID-19 pandemic was acknowledged as a challenge for implementing the Keys4Life program, it is clear from the interviews that the consultants turned these challenges into opportunities to progress and promote alternate ways of working. For example, when many schools closed in WA, the entire program was quickly placed online to be completed through distance learning. The KFL PD was also delivered online for regional teachers during this time. If these online materials and systems are developed further, this could result in greater reach and uptake of the Keys4Life program in the future, particularly in regional communities. The option of online delivery of Keys4Life in terms of the actual lessons and KFL PD may help

reduce some of the issues that the consultants raised relating to long travel distances and budgetary constraints in the regions. However, this relies on adequate internet access being available in regional communities.

Related to this, several stakeholders suggested that they would like to see an additional option for sharing information on the services their organisation provides and attending the KFL PD face-to-face. Compiling this information in the form of a pre-recorded video that could be played at the KFL PD or allowing stakeholders to attend the PD sessions remotely may increase teacher access to these services and information in regional WA.

Consultants also raised some concerns with the decreasing number of Parent-Student Workshops. As noted in Part A and B of this report, Parent-Student Workshops are an important component of Keys4Life because active parental involvement in learner driving reduces the risk of crashes among young drivers (Curry et al., 2015). Parental involvement also forms part of the *'whole school approach'* (SDERA, 2020b). Some consultants noted that they had experienced success with taking creative approaches to involve parents. Therefore, online options for delivering information in the Parent-Student Workshops may increase engagement.

A final suggestion for improving the program was refresher training for Keys4Life teachers. An online re-registration portal is currently being developed for Keys4Life teachers and will be compulsory. The implementation date is planned for late 2021 or early 2022. In response to previous feedback from teachers and consultants, an online teacher portal was introduced in 2020 for uploading student Learner's Permit Test results and the issuing Keys4Life certificates. This has improved the security of student data and record-keeping practices. It has also increased efficiency of reporting to both the Road Safety Commission and Department of Transport as well as internal reporting to the DoE (Department of Education consultant, personal communication, December 10, 2020).

5.4.1 Recommendations

Based on the responses from consultants and stakeholders, and information provided by DoE about changes to the program that are currently in progress, we have made the following recommendations from Part D of the evaluation.

- Investigate barriers to the implementation of Keys4Life in regional areas for schools and agencies.

- Explore alternative methods of delivering Parent-Student Workshop to reach more parents (see Part A recommendation).

- Engage with DoE consultants and agency staff to seek solutions that ensure that agencies can still implement Keys4Life following the recent changes in qualification requirements for administering the Learner's Permit Test.

- Develop videos of stakeholder presentations that can be played at KFL PD in metropolitan and regional areas and/or allow stakeholders to attend and present at the sessions remotely (online).

6 PART E: DEVELOPMENT OF PRE-AND-POST QUESTIONNAIRE

6.1 Background: Part E

The Keys4Life program comprises 10 lessons covering the WA licensing system, road user responsibilities, road rules, crash statistics, crash impact, decision making, road sharing, reducing the risk factors for crashes, supervised driving practice, safer vehicles, and first aid (Department of Education Western Australia). To date, the impact of these 10 lessons on pre-driver knowledge, attitudes or behaviour has not been evaluated. The objective of Part E was to:

- Develop a pre-and-post questionnaire for students who undertake the Keys4Life program to assess changes in beliefs, attitudes and behaviour related to road safety.

6.2 Methods: Part E

6.2.1 Review of existing questionnaires

A brief review of the literature was undertaken to identify existing instruments that measure the knowledge, attitudes or risk perception of pre-drivers aged 15–20 years. Questionnaires developed and used within Australia and internationally were included in the review. Multiple sources were used to undertake the literature review from 1990 to 2020, including published, peer-reviewed journal articles and grey literature such as reports and conference papers. The literature was obtained by searching Google, Google Scholar and various library databases, including UWA OneSearch, ScienceDirect, Web of Science, ProQuest and PubMed. The search terms included: *'young driver', 'novice driver', 'pre-driver', 'learner driver', 'risk perception', 'driving attitudes', 'safety attitudes', 'road safety intervention', 'evaluation', 'questionnaire'* and *'survey'*. Other relevant publications by authors who have published widely in the area and those cited by relevant articles were also reviewed. Where necessary, full copies of the questionnaires were obtained by emailing the authors.

6.2.2 Questionnaire development

Existing questionnaires that could measure knowledge, attitudes or risk perception among pre-drivers aged 15–20 years were compiled and assessed in terms of content, suitability for pre-drivers (i.e. not require actual driving experience to answer the questions), whether the instrument had been used in Australia and reported validity measures of the instruments. A

scale of risk perception (Ivers et al., 2009) and a scale of driving attitudes (Glendon et al., 2014) were selected for inclusion in the questionnaire. Demographic questions were added along with 11 questions addressing road safety areas that are a focus of the Keys4Life program but not covered by the two scales. The pre-and-post questionnaires were entered into Qualtrics so they could be completed online.

6.2.3 Pilot testing

A convenience sample of young pre-drivers or learner drivers was recruited in October 2020 to pilot test the pre-and-post questionnaire. Inclusion criteria were aged 15–20 years, do not yet have a provisional licence, and located in WA. Young people who had Learner's Permits and those who had previously completed the Keys4Life program were included since this study was only examining the questionnaire's psychometric properties. The sample was recruited through contacts of staff members at UWA using a flyer distributed in electronic and paper formats. The flyer described the pilot study and invited young people to participate. The flyer contained a link to an online Participant Information Form, Consent Form and the first online questionnaire. Researchers emailed the link for the second online questionnaire to each participant approximately three weeks after completing the first.

6.2.3.1 Data analysis

The sample was described initially in terms of demographic characteristics, the average time it took participants to complete the questionnaire on first and second administration, and the proportion that ceased filling in the questionnaire before completion.

Cronbach's alpha values were calculated to assess the internal consistency of the overall risk perception scale, the overall attitudes scale and each of its 10 subscales. Internal consistency measures how well a group of items in the questionnaire measure the same construct (Litwin, 1995). Alpha values range from 0–1 with higher values indicating that items are highly related or correlated. Scales or subscales with alpha values between 0.70 and 0.95 have good internal consistency (Tavakol & Dennick, 2011). Alpha values were only calculated for the first time point in this study due to the small sample size for the second time point.

The test–retest reliability of the questionnaire was assessed for those who participated in both the first and second questionnaire. This is a measure of the stability of participant responses over time (Litwin, 1995). Intraclass correlation coefficients (ICCs) were calculated for the overall risk perception scale score, overall attitudes scale score and each of the 10 subscales, along with nine of the 11 individual items in the questionnaire that did not form part of a scale.

ICCs are suitable for use with continuous scores and Likert scales. The two-way random, single measure model was used (ICC (2,1)). ICC reliability values range from 0 to 1, with higher values indicating better reliability. Values <0.4 are considered poor, 0.4–0.6 are fair, 0.6–0.75 are good, and >0.75 are excellent (Fleiss, Levin, & Paik, 1981). The final two questions on supervised driving hours were recoded into a binary variable and kappa values calculated. Kappa values from 0–0.2 are considered slight, 0.21–0.4 are fair, 0.41–0.6 are moderate, 0.61–0.8 are substantial, and 0.8–1.0 are almost perfect (Landis & Koch, 1977). All analyses were undertaken using SPSS, version 26.

6.3   Results: Part E

6.3.1   Review of existing instruments

The Keys4Life program targets young pre-drivers before they have obtained their Learner's Permit. Therefore, it is suitable for short-term evaluations examining the program's impact on outcomes such as road safety-related attitudes and risk perception. Previous research suggested that attitudes and risk perception may be antecedents of unsafe driving behaviour (Glendon et al., 2014). For example, specific attitudes towards risky driving behaviours, such as rule violations, joyriding and speeding, have been associated with aggressive driving, speeding behaviour and crashes (Iversen, 2004; Lawton, Parker, Manstead, & Stradling, 1997; Ulleberg & Rundmo, 2002; Ulleberg & Rundmo, 2003; West & Hall, 1997). In addition, young people who perceive driving risks as low (e.g. the probability of a crash) are more likely to engage in unsafe driving behaviour (Hatfield & Fernandes, 2009; Ivers et al., 2009; Ulleberg & Rundmo, 2003; Weinstein, Rothman, & Nicolich, 1998).

Most instruments located examined driving behaviour among novice drivers and most of those that examined attitudes required participants to have knowledge and experience of driving. Instruments determined unsuitable for the Keys4Life program evaluation for these reasons included:

- Driving Expectancy Questionnaire (DEQ) (Deery & Love, 1996)

- Driver Survey (Section 3) (Deery, Kowadlo, Westphal-Wedding, & Fildes, 1998)

- Driver Attitude Questionnaire (Parker, Stradling, & Manstead, 1996)

- Theory of Planned Behaviour (TPB) scale (Parker, Manstead, Stradling, Reason, & Baxter, 1992)

- Driver Behaviour Questionnaire (DBQ) (Reason, Manstead, Stradling, Baxter, & Campbell, 1990)

- Attitudes to Driving Violations Scale (ADVS) (West & Hall, 1997).

In addition, the Adolescent Road User Behaviour Questionnaire (ARBQ) was considered but it focuses on pedestrian and cyclist behaviours, rather than driving (Elliott & Baughan, 2004). The Violation Willingness Scale (VWS) measures respondent willingness to violate the road rules in eight scenarios (Rowe, Andrews, & Harris, 2013). This instrument was not selected for inclusion in the questionnaire because almost all the items focused on speeding violations, and

the Keys4Life program covers a much broader scope than just speeding. Two instruments were identified as suitable for measuring risk perception and attitudes in young drivers, which are described below.

6.3.1.1 Risk perception scale

The risk perception scale formed part of the DRIVE Study questionnaire developed by Ivers et al. (2009). It comprises 10 items relating to risk perception or perceptions of safety during certain driving tasks (i.e. *'When you are driving, how safe do you think the following are?'*). Each item is measured on a four-point Likert scale, and items are summed to produce a total score. Higher scores on the scale represent more risky perception (poorer perception of safety), and lower scores on the scale represent less risky perception. The scale items were adapted from previous research in New Zealand (Begg, Brookland, Hope, Langley, & Broughton, 2003) and the USA (Donovan & Jessor, 1992). Ivers et al. used the risk perception scale as part of the DRIVE Study involving young NSW drivers and found that high scores on the scale (poorer perceptions of safety) were associated with increased crash risk. However, significance was not sustained after adjustment for risky driving (Ivers et al., 2009). The risk perception scale was also used in a more recent study in Queensland to evaluate the effectiveness of a road safety intervention for 133 novice drivers, pre-drivers and passengers (Glendon et al., 2014). Internal consistency using Cronbach's alpha was calculated for the overall scale, which ranged from 0.84–0.86 over three time-points (Glendon et al., 2014), indicating good internal consistency.

6.3.1.2 Attitudes towards unsafe driving

The scale measuring attitudes towards unsafe driving is based on an instrument developed and validated in Norway (Ulleberg & Rundmo, 2002). This scale originally comprised 42 items with 11 factors. Each item is measured on a five-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). Higher scores on the scale represent unsafe driving attitudes, and lower scores on the scale represent safer driving attitudes. More recently, Glendon et al. modified the language of this scale to fit the Australian context, and administered the scale to a sample of Queensland high school students participating in a road safety intervention and undertook exploratory factor analysis (Glendon et al., 2014). This resulted in a reduced attitudes scale consisting of 30 items and 10 factors (subscales). One item on the scale was derived from the ADVS (West & Hall, 1997). The subscales were riding with an unsafe driver, speeding, concern about hurting others, drinking and driving, showing off driving skills to others, traffic

flow vs rule obedience, joyriding, dare to speak up to an unsafe driver, risk of crashes and traffic rule violations. Glendon et al. administered the scale at three time-points and calculated internal consistency using Cronbach's alpha. For the overall scale, Cronbach's alpha ranged from 0.89–0.91 indicating good internal consistency. For the factors (subscales), Cronbach's alpha ranged from 0.66–0.91 indicating good internal consistency for most factors (Glendon et al., 2014).

6.3.2 Pre-and-post questionnaire

The pre-and-post questionnaire comprised a 5–10 minute online survey, administered twice. These questionnaires were identical, except that the pre-version collected demographic information. The pre-version of the questionnaire is in Appendix 2. The questionnaire collects information on:

- *Demographics:* Sex, age, year level at school and whether they had a Learner's Permit.

- *Risk perception scale:* 10-item previously validated scale (Ivers et al., 2009). Each item was measured on a four-point Likert scale from 0 (rarely safe) to 3 (always safe), and summed to produce a total score between 0 and 30.

- *Attitudes scale:* 30-item previously validated scale (Glendon et al., 2014). Each item was measured on a five-point Likert scale from 1 (strongly disagree) to 5 (strongly agree), and summed to produce a total score between 30 and 150.

- *Additional items:* 11 additional items were added that examined knowledge, attitudes and intentions surrounding supervised driving, seat belts, fatigue, safer vehicles and risk factors for crashes. These were added because they represent significant learning areas in the Keys4Life program not covered by the other scales in the questionnaire. These items were based on previous questionnaires used by the DoE that have not been evaluated formally.

Minor changes to some wording in the previously developed scales to make them suitable for the young WA participants.

6.3.3 Pilot testing of pre-and-post questionnaire

6.3.3.1 Sample

Twenty-four participants answered the first questionnaire, and nine answered the second questionnaire (37.5%). Seven of the nine completed the second questionnaire. Participants

completed the questionnaires at an average interval of 25.6 days (SD: 5). Table 6.1 presents the characteristics of those who participated in the first and/or second questionnaires. For the first time point, most participants were male (75.0%), aged 15–16 years (70.8%), in Year 10 or 11 at school (62.5%), had their Learner's Permit (58.3%) and had previously completed the Keys4Life program (75.0%). The sample who completed the second questionnaire were older (55.6% aged 17) and just over half were male (55.6%).

Table 6.1 Characteristics of pilot test participants

Characteristic	T1 (N=24)		T2 (N=9)	
	N	%	N	%
Sex				
Male	18	75.0	5	55.6
Female	6	25.0	4	44.4
Age (years)				
15	8	33.3	2	22.2
16	9	37.5	2	22.2
17	5	20.8	5	55.6
18	2	8.3	0	0.0
School year level				
Year 9	2	8.3	0	0.0
Year 10	7	29.2	2	22.2
Year 11	8	33.3	2	22.2
Year 12	6	25.0	5	55.6
Non-school student	1	4.2	0	0.0
Learner's Permit				
No	10	41.7	3	33.3
Yes	14	58.3	6	66.6
Completed Keys4Life				
No	6	25.0	1	11.1
Yes	18	75.0	8	88.9

6.3.3.2 Questionnaire timing and completion

The first questionnaire took an average of 8.8 minutes (SD: 3.7) to complete (range 4.5–18.0 minutes). The second questionnaire took an average of 4.5 minutes (SD: 0.6) to complete (range 3.8–5.4 minutes). The first questionnaire took longer to complete because it included the Participant Information and Consent Form. Twenty-three of the 24 participants (95.8%) answered all the questions in the first questionnaire, and seven of nine participants (77.8%) answered all the questions in the second questionnaire.

6.3.3.3 Internal consistency

Table 6.2 presents the Cronbach's alpha values calculated to assess the internal consistency of the overall risk perception scale, overall attitudes scale and each of its 10 subscales. Cronbach's alpha values were only calculated for the first questionnaire due to the small sample size of the second questionnaire. Both of the overall scales had good internal consistency (α=0.74 and 0.86), as did nine of the 10 subscales with alpha values ranging from 0.82–0.94. The *'joyriding'* subscale had a lower (poorer) alpha value of 0.62.

Table 6.2 Cronbach's alpha values for the risk perception scale and the attitudes scale and subscales

Scales and subscales	No. items	Mean score (SD)	α
Risk perception scale (total score) [a]	**10**	**5.3 (3.0)**	**0.74**
Attitudes scale (total score) [b]	**30**	**78.7 (15.2)**	**0.86**
Subscale 1: Riding with an unsafe driver [a]	5	15.8 (5.5)	0.88
Subscale 2: Speeding [a]	4	10.5 (4.3)	0.87
Subscale 3: Concern about hurting others [a]	2	9.4 (2.3)	0.88
Subscale 4: Drinking and driving [a]	2	3.9 (2.2)	0.94
Subscale 5: Showing off driving skills to others [a]	3	10.5 (2.4)	0.83
Subscale 6: Traffic flow vs rule obedience [b]	5	11.3 (4.0)	0.82
Subscale 7: Joyriding [b]	2	4.0 (1.5)	0.62
Subscale 8: Dare to speak up to an unsafe driver [b]	2	5.4 (2.0)	0.88
Subscale 9: Risk of crashes [b]	2	3.0 (1.3)	0.89
Subscale 10: Traffic rule violations [b]	3	5.0 (3.0)	0.92

[a] N=24   [b] N=23

6.3.3.4   Test–retest reliability

Table 6.3 presents the ICCs calculated to assess test–retest reliability for the overall risk perception scale, overall attitudes scale and each of its 10 subscales. Both of the overall scales had excellent test–retest reliability with ICCs of 0.87 and 0.89, as did five of the 10 subscales (ICC=0.81–0.96). One subscale was considered *'good'* with an ICC of 0.73 and two were *'fair'* with ICCs of 0.55 and 0.59. Two subscales had *'poor'* test–retest reliability, being *'joyriding'* (ICC=0.37) and *'risk of crashes'* (ICC=0.27). On inspection, one individual question within each subscale had a particularly poor ICC, leading to the subsequent poor ICC for the subscales.

Table 6.3 Intraclass correlation coefficients (ICC) for the risk perception scale and the attitudes scale and subscales

Scales and subscales	ICC
Risk perception scale (total score) [a]	**0.87**
Attitudes scale (total score) [b]	**0.89**
Subscale 1: Riding with an unsafe driver [b]	0.81
Subscale 2: Speeding [b]	0.96
Subscale 3: Concern about hurting others [b]	0.96
Subscale 4: Drinking and driving [b]	0.59
Subscale 5: Showing off driving skills to others [b]	0.73
Subscale 6: Traffic flow vs rule obedience [b]	0.93
Subscale 7: Joyriding [b]	0.37
Subscale 8: Dare to speak up to an unsafe driver [b]	0.55
Subscale 9: Risk of crashes [b]	0.27
Subscale 10: Traffic rule violations [b]	0.92

[a] N=9   [b] N=7

Test–retest reliability was examined for the 11 individual items added to the questionnaire that did not form part of a scale. ICCs were calculated for the nine items using a Likert scale. Two questions had *'excellent'* test–retest reliability (ICC: 0.80–0.88), four were *'fair to good'* (ICC: 0.53–0.74) and three were *'poor'*. These were:

- *'I'd keep driving if I wanted to get home, even if I was tired and struggling to keep my eyes open'*

- *'Most crashes happen because drivers make mistakes'*

- *'Female drivers have more road crashes than male drivers'.*

For Question 9, no test–retest reliability was calculated because all participants selected the same correct answer at the second administration. Question 10 on intended hours of supervised driving was recoded into a binary variable, and a kappa value of 0.59 showed moderate reliability.

6.4   Discussion: Part E

Part E involved developing and pilot testing a questionnaire that could be administered to pre-drivers before and after participating in the Keys4Life program. The questionnaire was based on two previously developed instruments and measured risk perception and road safety attitudes (Glendon et al., 2014; Ivers et al., 2009). The pilot test showed that overall, these instruments had good internal consistency and test–retest reliability. This means that when the questionnaire is implemented before and after Keys4Life, any changes in attitudes and risk perception can be attributed to program effects.

The pilot test also determined that the online questionnaire was an acceptable length, taking an average of nine minutes to complete at the first time point and five minutes at the second time point. Only a small proportion of participants who started the questionnaire did not complete it (4% for the first questionnaire and 22% for the second). However, it was difficult to get the young participants to complete the second survey, resulting in high loss to follow-up (63%) for the pilot study. This may have been due to the timing of the pilot study, with the second survey falling during exams or the end of school for some participants. Loss to follow-up will likely be an issue when implemented with Keys4Life students in schools. Ways to minimise this include completing the evaluation earlier in the year, avoiding exam periods, and involving Keys4Life teachers to remind students to complete the questionnaire.

When this survey is implemented with Keys4Life students, it would be useful to collect information about the students' school to compare the responses by region and education system. Whether students had attended a Parent-Student Workshop should also be included as this may affect the risk perceptions and attitudes being measured in the questionnaire and would need to be controlled for in the analyses. It would also be useful to include process evaluation questions in the post-survey on how students found the Keys4Life lessons and suggestions for improvement. The three questions with poor test–retest reliability should be removed from the questionnaire or analysed with caution.

The main limitations of this pilot study were the small sample size and high loss to follow-up. However, since the pilot study produced similar results to previous validation studies conducted in Australia with larger sample sizes, we can be confident in the results. Finally, the questionnaire uses somewhat sophisticated language and may need to be adapted and re-tested among culturally and linguistically diverse students.

7 CONCLUSION

Overall, this evaluation reported positive findings in terms of engagement with the Keys4Life program, Parent-Student Workshops, Keys4Life PD and stakeholder/Regional Consultant feedback. The number of schools and school students participating in Keys4Life continues to increase, and it is estimated that approximately three-quarters of WA Year 10 students (73%) and schools with capacity (76%) took part in 2020. However, the evaluation revealed that a lower proportion of regional and AISWA schools implement the program, compared to metropolitan and DoE schools.

Feedback from Parent-Student Workshops was also positive. A particularly encouraging finding was that most parents/carers (95%) and students (96%) intended to complete more than the 50 required hours of supervised driving after attending the workshop. This suggests that the workshop content is useful and effective, with no major changes required. Therefore, to engage parents/carers in Keys4Life, schools should be encouraged to host the program and enrol parents/carers to attend Parent-Student Workshops. This may require delivering the content to parents/carers via a different format.

This was the first evaluation to include feedback from the Keys4Life PD. The feedback was extremely positive, with only minor suggestions for improvement.

The DoE consultants and stakeholders made positive comments on the Keys4Life program. Participants also reported some challenges or barriers for Keys4Life, particularly in regional areas, including the lack of cultural and regional specific content in the Keys4Life resources, qualification requirements for administering the Learner's Permit Test, COVID-19, decreasing numbers of Parent-Student Workshops, and long travel distances for consultants to visit regional towns and communities.

Overall, this evaluation confirmed the findings of the previous process evaluations—that Keys4Life is performing well in terms of engagement and participant satisfaction. The development and pilot testing of a pre-and-post questionnaire as part of this project will collect valuable new information on the actual impact of the Keys4Life lessons on students' risk perception and road safety attitudes in Phase 2. Phase 2 of the evaluation will build on the Phase 1 findings by seeking feedback and suggestions for improvement from teachers implementing Keys4Life in schools and non-school agencies, agency students and Principals/school leaders from non-engaged schools.

7.1 Recommendations

The following recommendations have been compiled from Parts A–E of the evaluation.

1. Investigate barriers to the implementation of Keys4Life for regional and AISWA schools.

2. Investigate reasons for the increased implementation of Keys4Life by non-school agencies in 2020 and market the program to relevant agencies that have never delivered or ceased delivering the program.

3. Explore alternative methods of delivering Parent-Student Workshops to reach more parents/carers, including online workshops held at a specific time, webinars that can be watched at any time, a Podcast of the workshop, or content delivery in a written format (electronic or paper copies).

4. Investigate whether parents/carers from regional areas have less confidence surrounding teaching their child to drive than metropolitan parents/carers and examine whether the Parent-Student Workshop content could be adapted to suit the needs of regional parent/carers.

5. Consider providing the Keys4Life PD PowerPoint presentations, electronic course resources, infographics/videos and supplementary information to KFL PD participants on a USB in a format compatible with Mac and PC.

6. Review the structure of the Keys4Life PD and time spent on each component.

7. Investigate the possibility of developing a *Behind the Wheel Journal* app that students could complete on an android or Apple device.

8. Engage with DoE consultants and agency staff to seek solutions that ensure that agencies can still implement Keys4Life following recent changes in the qualification requirements for administering the Learner's Permit Test.

9. Develop videos of stakeholder presentations that can be played at KFL PD in metropolitan and regional areas and/or allow stakeholders to attend and present at the sessions remotely (online).

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APPENDICES

Appendix 1: Discussion Guides

Keys4Life Evaluation: DoE Consultant Discussion Guide

INTRODUCTION

Introduce interviewer and interview process

- Introductions – who you are and reason for the discussion
- Explain timing (focused on the objectives we just discussed, while happy to take on other feedback, I might come back to things at the end), recording (for my notes, it will not be distributed or used in any other way)

SECTION 1: Explore role and relationship with Keys4Life Program

- What is your role in the Keys for Life program in your region?

- Are there any barriers in performing your role?

- In what areas do you think Keys for Life program is performing well? (probe communication, delivery of the program, program content, Materials / resources, professional development, guest speakers)

- Where is there need for improvement? (probe communication, delivery of the program, program content, Materials / resources, professional development, guest speakers)

- Are there any barriers for teachers to attend the Keys for Life professional development training in Keys4Life Program in your region?

- Are there any barriers for teachers to conduct the Keys for Life program in schools in your region?

- Do you have any suggestions for overcoming any barriers identified?

- **Note to interviewer:** *If words such as consistent, coordinated and evidence based mentioned probe on what this means to them*
- **Note to interviewer:** *If words such as consistent, coordinated and evidence based NOT mentioned ask how important are these / what do they mean*
- ***Do not lead with by telling them how this is achieved and do not explain***

REFERENCE GROUP
- Are you aware of a SDERA led road safety reference group?
- What role does this group play?
- What is the benefit of the reference group?

SECTION 2: Determine communication needs/wants and support
   a. Satisfaction with, and communication needs (what, how often)
   b. Willingness to promote K4L with non-engaged schools

COMMUNICATION
- How do you prefer to receive communications from SDERA head office and the Keys for Life program?
- Do you have any suggestions for improved communication channels?
- How does SDERA head office currently offer support to you in the region?
- How does this compare to the ideal level support you would like to receive?

INCREASING SCHOOLS PARTICIPATION RATES
We are looking to increase the number of schools participation in the Keys4Life program.
- How do you think you would be able to assist with engaging schools to participate in the Keys4Life Program in your area?
- Is there any other support that you need from SDERA that could assist you?

FOR SDERA CONSULTANTS WHO ARE CONDUCTING WORKSHOPS

- How do you find the delivery of the Keys for Life Workshops and materials?
- Are there any barriers to conducting these?
- Can SDERA head office assist in anyway?

CONCLUSION

- Any further feedback?
- Thank and close

Keys4Life Evaluation: Key Stakeholder Discussion Guide

INTRODUCTION

Introduce interviewer and interview process

- Introductions – who you are and reason for the discussion
- Explain timing (focused on the objectives we just discussed, while happy to take on other feedback, I might come back to things at the end), recording (for my notes, it will not be distributed or used in any other way)

SECTION 1: Explore relationship and satisfaction with SDERA and Keys4Life

a. Explore perceptions of SDERA and Keys for Life program
b. Explore satisfaction with the role SDERA is playing overall and with the delivery of Keys4Life
c. Identify areas for improvement for SDERA and Keys4life
d. Explore the perceived role of SDERA vs. other organisations involved
e. Identify the perceived key benefits of associating with SDERA
f. Gauge awareness and role of the SDERA led reference group

SATISFACTION WITH SDERA AND AREAS FOR IMPROVEMENT

- Overall, how satisfied are you with SDERA?
- Why do you say that?
- In what areas is SDERA performing well? (probe satisfaction with support, programs, delivery, engagement)
- Where is there need for improvement? (probe communication, avoidance of duplication, likelihood of complementing K4L program)
- Do you believe SDERA and K4L are contributing to the 'Towards Zero' WA Road Safety Strategy 2008-2020?
- How does SDERA currently offer support to your organisation?
- How does this compare to the ideal level support you would like to receive?

SDERA ROLE VS. OTHERS IN ROAD SAFETY

- What role does SDERA play in the area of road safety education in Western Australia?
- Do you see them as leaders / coordinators in this area? (Why / why not?) Who is? *(Probe the following organisations)*
    - Paraplegic Benefit Fund
    - RAC
    - St John Ambulance
    - Headwest
    - Royal Perth Hospital's PARTY program
    - Public Transport Authority
    - Transport (Driver and Vehicle Services)

SATISFACTION WITH THE KEYS FOR LIFE PROGRAM AND AREAS FOR IMPROVEMENT

- Overall, how satisfied are you the Keys for Life program?
- Why do you say that?
- In what areas is Keys for Life performing well? (probe communication, delivery of the program, program content, Materials / resources, professional development, guest speakers)
- Where is there need for improvement? (probe communication, delivery of the program, program content, Materials / resources, professional development, guest speakers)
- **Note to interviewer:** *If words such as consistent, coordinated and evidence based mentioned probe on what this means to them*

- **Note to interviewer:** *If words such as consistent, coordinated and evidence based NOT mentioned ask how important are these / what do they mean*
- ***Do not lead with by telling them how this is achieved and do not explain***

BENEFITS
- What are the benefits to your organisation working with SDERA? With Keys for Life? (is there a mutual benefit)

REFERENCE GROUP
- Are you aware of a SDERA led road safety reference group?
- What role does this group play?
- What is the benefit of the reference group?
- How satisfied are you with SDERA's engagement of complementary stakeholder groups? Does SDERA manage this effectively in relation to road safety education?

SECTION 2: Determine communication needs/wants
   a. Satisfaction with, and communication needs (what, how often)
   b. Willingness to promote K4L through their association with non-engaged schools

COMMUNICATION
- What is your preferred channel to receive communications from SDERA and the Keys for Life program?
- What type of information do you want to receive from SDERA?
- What level of information do you want to receive?
- How frequently would you like to receive communications form SDERA?
- Are there any gap / opportunities to improve this support?

- Are you aware SDERA manages an online directory for schools promoting stakeholders and other relevant sources?
Road Map: A Road Safety Directory for Schools and Communities provides information to assist school communities. It contains helpful information and contact details of agencies across WA who offer road safety professional development, resources and other services such as school presentations.
- Does SDERA play a role in avoiding the duplication of road safety information to students? How important is this?
- *Note for interviewer, this is achieved via:*
    - *Discussion at WARSEC meetings*
    - *The development of the Principles for School Road Safety Education (SDERA published in 2009 following a commissioned body of research from ECU)*
    - *The development of a biennial (WARSEC) action plan called Directions*

INCREASING SCHOOLS PARTICIPATION RATES
- We are looking to increase the number of schools participation in the Keys4Life program.
- Do you think you can support this? How? Would you be willing to engage schools through your links?
- What can SDERA do to support your promotion of SDERA's Keys for Life program?

FOR STAKEHOLDERS WHO ARE PROVIDING WORKSHOPS

3. Involvement in Keys for Life and benefits to their organisation

    a. Engagement with the program (delivery etc.)

    b. Perception of whether their association with SDERA has increased confidence in road safety delivery that complements the K4L program

    c. Stakeholders willingness to, and barriers to participate

LEVEL OF ENGAGEMENT
- How satisfied are you with your organisation's involvement with SDERA and the Keys for Life program?
- How effectively does the SDERA Keys for Life program currently engage with your organisation?
- How would you like to be engaged?
- Opportunities to improve engagement
    - Frequency / level of communication
    - Involvement in action planning
    - Involvement in course delivery

PARTICIPATION
- Do you find it easy to participate in delivering Keys for life Workshops? Why? What are the barriers?
- How can SDERA assist?

CONCLUSION

- Any further feedback?
- Thank and close

Appendix 2: Pilot questionnaire

THE UNIVERSITY OF
WESTERN
AUSTRALIA

Pilot questionnaire (pre-version): online

1. Please provide your contact details

   Name:

   Email: _____

   Mobile phone:

2. What is your sex?
   - ☐ Male
   - ☐ Female
   - ☐ Other
   - ☐ Prefer not to say

3. What is your age?

   _____ years

4. What year are you in at school?
   - ☐ Year 10
   - ☐ Year 11
   - ☐ Year 12
   - ☐ Not applicable

5. Do you have your Learner's Permit?
   - ☐ Yes
   - ☐ No

6. Have you completed the Keys4Life Program?
   - ☐ Yes
   - ☐ No
   - ☐ Unsure

If any of the following questions about road safety make you feel distressed or upset, please contact:
- *Road Trauma Support WA   (08) 6166 7688 or 1300 004 814   OR*
- *Kids Helpline   1800 55 1800*

Risk Perception Scale

7. **The following questions ask about different driving situations and how safe you think they are. How safe do you think the following are?**

	Rarely safe	Sometimes safe	Mostly safe	Always safe
Driving with 2 or more passengers	☐	☐	☐	☐
Driving between midnight and 6am	☐	☐	☐	☐
Driving at 110 km/h in a 100 km/h zone	☐	☐	☐	☐
Driving at 70 km/h in a 60 km/h zone	☐	☐	☐	☐
Driving while talking on a mobile phone	☐	☐	☐	☐
Driving a poorly maintained car	☐	☐	☐	☐
Driving with a blood alcohol level just over the legal limit	☐	☐	☐	☐
Driving while using SMS on a mobile phone	☐	☐	☐	☐
Driving after smoking marijuana	☐	☐	☐	☐
Going through a red light	☐	☐	☐	☐

Driving attitudes scale

8. **Everyone has different opinions about driving and road safety.**
Read each sentence and tick the box that best matches your opinion.

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
I would get into my friend's car even though s/he is known to be an unsafe driver	☐	☐	☐	☐	☐
I would probably ride with a friend who drives unsafely if I trusted him or her	☐	☐	☐	☐	☐
I might get into the car with friends who I know are unsafe drivers	☐	☐	☐	☐	☐
I would get into the car with a reckless driver if I had no other way to get home	☐	☐	☐	☐	☐
I might get into the car with an unsafe driver if my friends did	☐	☐	☐	☐	☐
If you are a safe driver, it is ok to speed by 10 km/h in 80-90 km/h speed zones	☐	☐	☐	☐	☐

I think it's ok to speed if the traffic conditions allow you to do so	☐	☐	☐	☐	☐
If you have good skills, speeding is OK	☐	☐	☐	☐	☐
Driving 5 or 10 km/h above the speed limit is ok because everyone does it	☐	☐	☐	☐	☐
Hurting someone else with my car would scar me for life	☐	☐	☐	☐	☐
I couldn't live with myself if I hurt another human being in traffic	☐	☐	☐	☐	☐
I might get into the car with a driver who has been drinking	☐	☐	☐	☐	☐
I would get into the car with a driver who has been drinking if I knew and trusted him or her	☐	☐	☐	☐	☐
Most people like to show off their skills by driving fast	☐	☐	☐	☐	☐
When people drive they like to be different- not to be ordinary cautious drivers	☐	☐	☐	☐	☐
People will usually drive faster when their friends are in the car	☐	☐	☐	☐	☐
Sometimes it is necessary to break the traffic rules in order to get ahead	☐	☐	☐	☐	☐
Sometimes it is necessary to take chances in traffic	☐	☐	☐	☐	☐
Sometimes it is necessary to bend the traffic rules to arrive on time	☐	☐	☐	☐	☐
There are many traffic rules which cannot be obeyed in order to keep up the traffic flow	☐	☐	☐	☐	☐
It is more important to keep up with the traffic flow rather than always follow the traffic rules	☐	☐	☐	☐	☐
Speeding and excitement belong together when you are driving	☐	☐	☐	☐	☐
Driving is more important than transportation, it is also about speeding and fun	☐	☐	☐	☐	☐
I would be very unpopular if I asked the person driving to drive more carefully	☐	☐	☐	☐	☐
If I asked my friends to drive more carefully, it would be seen as a hassle	☐	☐	☐	☐	☐
The risk of dying young in a traffic crash is so low that you can ignore it	☐	☐	☐	☐	☐

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
Run-off-road crashes are so rare that there is no need to worry about them	☐	☐	☐	☐	☐
You should always follow the traffic rules, regardless of the driving conditions	☐	☐	☐	☐	☐
You should always obey laws when driving	☐	☐	☐	☐	☐
Even at night time on quiet roads it is important to keep within the speed limit	☐	☐	☐	☐	☐

Additional questions

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
The more hours of supervised driving I do as a learner, the safer I will be as a driver on P-plates	☐	☐	☐	☐	☐
You don't need to wear a seat belt if you are driving on country roads	☐	☐	☐	☐	☐
I'd keep driving if I wanted to get home, even if I was tired and struggling to keep my eyes open	☐	☐	☐	☐	☐
A safer car will protect me and my passengers in the event of a crash	☐	☐	☐	☐	☐
Most crashes happen because drivers make mistakes	☐	☐	☐	☐	☐
Drivers like my parents are more likely to have a road crash than a young person	☐	☐	☐	☐	☐
Female drivers have more road crashes than male drivers	☐	☐	☐	☐	☐
There are more road crashes in the country than in the city	☐	☐	☐	☐	☐
Winding down the window or playing loud music will help a driver stay awake	☐	☐	☐	☐	☐

9. **What is the minimum number of supervised driving hours legally required for a WA driver's licence?**

☐ 25 hours
☐ 50 hours
☐ 75 hours
☐ 100 hours
☐ Unsure

10. How many hours of supervised driving do you intend to achieve and record in your log book?

☐ Less than 50 hours

☐ 50 hours

☐ 50 to 75 hours

☐ 75 to 100 hours

☐ 100 to 120 hours

☐ More than 120 hours

THANK YOU FOR COMPLETING THE SURVEY