Children's University Australia evaluation: Summary report

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National Centre for Vocational Education Research

NCVER

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NATIONAL CENTRE FOR
VOCATIONAL EDUCATION RESEARCH

CONSULTANCY REPORT

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What is Children's University Australia?

Children's University Australia (CUA) is a program launched in the latter half of 2013 in South Australia which provides extra-curricular learning opportunities for students, with the aim of encouraging a love of learning. These learning opportunities also provide disruptions to the student's learnt cultures of family and place, so that educational pathways and career goals outside of these norms are seen as viable and possible. The Children's University program is well established in the U.K. with South Australia being the first version to operate in the Australian education context.

Children's University Australia provides quality assured activities outside of the school curriculum, which are fun, voluntary, varied and have a link to higher learning. These provide a platform for children to develop educational and work aspirations. All activities are validated by CUA to ensure they have links to further study options. Often these learning experiences for CUA participants become available through leveraging local education and learning activity providers (including sports clubs, museums, galleries and school clubs). These external providers are referred to as Learning Destinations.

Learning destinations offer activities that can typically be accessed by the public, as a CUA member these activities count towards the program. The learning destinations may offer reduced fees for CUA students or may remove these fees. For example, the Adelaide Zoo typically offers child tickets for $19, but with a passport and accompanying adult offers $8 student tickets. There are also restricted access destinations, not available to the public, such as clubs running in and by schools. Many schools run various activities during and outside of school hours.

Each participating school has an internal CUA coordinator; they are responsible for co-ordinating any activities run in the school, keeping track of students' stamps, organising their students for graduation, co-ordinate payment of a small fee from students upon joining the program and annual renewal fees. The CUA coordinator is also able to validate additional learning activities. A small number of schools are CUA 'Champion' schools. These are some of the original schools in the program and are Department of Education and Child Development (DECD) category 1-3 schools (as described below; a level of educational disadvantage). These schools are not required to pay renewal fees, therefore once a student has a passport they do not pay annual renewal.

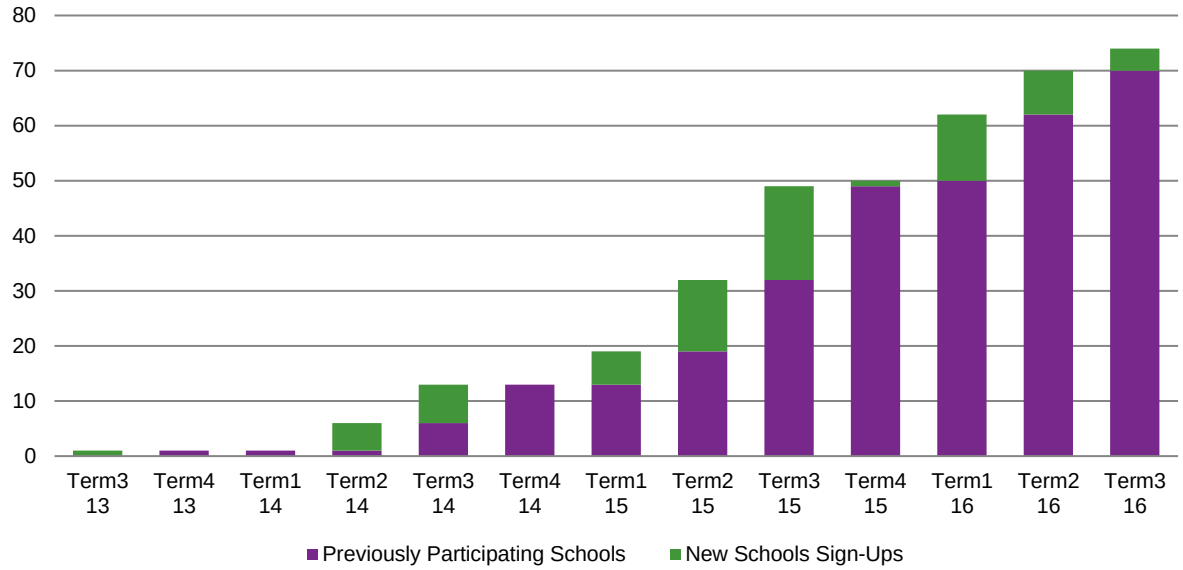
At the core of the CUA program is the Passport: The Passport to Learning for children aged seven to fourteen and the Passport to Volunteering for older students. Each participant has a unique Passport ID. The hours of each completed extracurricular activity are recorded in these passports with 'stamps'. When a certain number of credits (stamps) are accumulated, participants are presented with certificates of achievement at a formal graduation ceremony held at the University of Adelaide grounds and presided over by a senior academic, typically at Vice Chancellor level. It takes a minimum of 30 hours' worth of stamps for a graduation certificate (each certificate is reached at a new level). Students should have no more than 10 hours of stamps per activity, and some schools enforce that students must do at least one activity outside of the school. The school determines when the student has achieved this; therefore variability exists between how the schools apply these rules.

Who does CUA?

Participating schools

The number of schools participating in the CUA program has increased steadily since the launch in Term 3, 2013. Figure 1 shows the number of participating schools, with the grey bars showing new schools in that term and the black bars showing already participating schools. As we see, since CUA's launch there has been a rapid uptake of the program, typically in the earlier terms of a year. The numbers for Term 3 2016 are projected figures.

Figure 1: Schools participating in the CUA program by school term and year



The CUA program in South Australia is currently targeting disadvantaged schools, categories 1-3 on the DECD Index of Educational Disadvantage, though is available for all schools that express an interest. This index is not available for Catholic or Independent schools which make up 52% of participating schools. However, Index of Community Socio-Educational Advantage (ICSEA) data is available for all schools, a rating of 1000 being the Australian average. Please refer to the My Schools Website[1] for an easy to understand review.

Referring to Table 1, the difference between the average and median ICSEA for Catholic and Independent schools (4.7 points difference) is smaller compared with DECD schools (35.7 points difference). We see that the Catholic and Independent schools have an ICSEA above the Australian average of 1000, whilst the DECD schools are below this average. We also see much higher levels of educational disadvantage in the DECD schools with an average of 37.8% of students in the bottom quartile and a median of 47.5%. This is contrasted with the average of 17.5% and median of 16.0% of students in the bottom quartile observed for Catholic and Independent schools. It should be noted that both sectors include schools involved in CUA that have high advantage or disadvantage, however on the whole participating DECD schools display greater disadvantage than both Catholic and Independent schools and the Australian average and their average is being artificially inflated by some higher advantage schools.

[1] https://www.myschool.edu.au/AboutUs/Glossary/glossaryLink

Table 1: ICSEA data by school sector for 2015 participating schools[1]

DECD schools		Catholic and Independent Schools	
ICSEA			
Average	980.2	Average	1033.7
Median	944.5	Median	1029
Percentage of students in the most disadvantaged quartile			
Average	37.8%	Average	17.5%
Median	47.5%	Median	16.0%

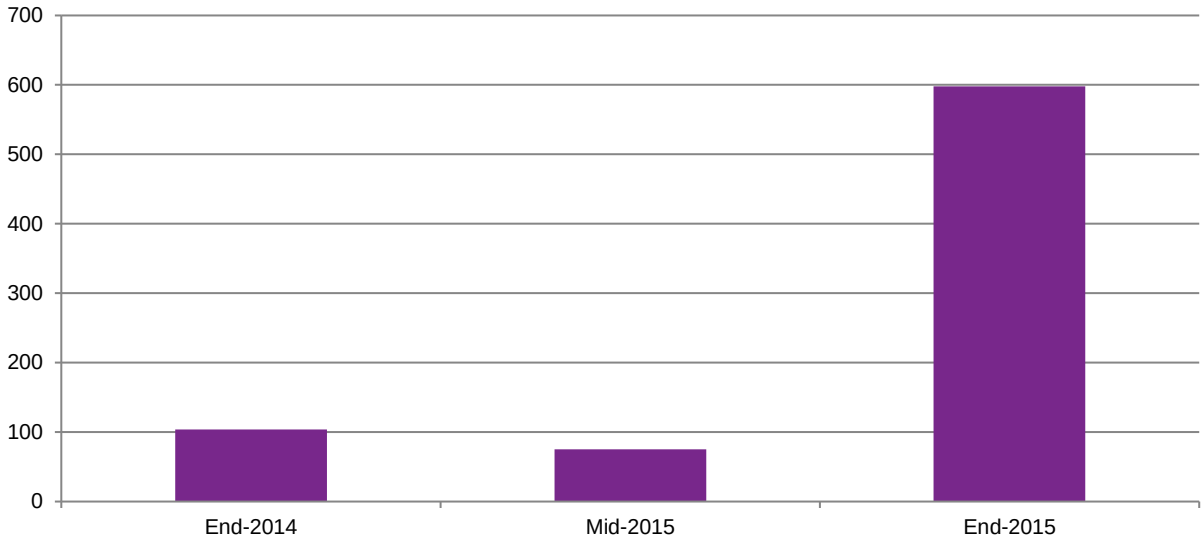
[1]: Note that minimum and maximums have not been provided as they were deemed too identifying for the schools in question.

Participating students

The number of students actively participating in the CUA program is difficult to determine, as students may have a passport but not be actively engaged with the program, reengage at a later time, or may withdraw. There are currently over 3500 Passports to Learning in South Australia.

The numbers of graduating students gives us an indication of the growth in student numbers. As seen in Figure 2, there has been a six-fold increase in graduating students from the end of 2014 to the end of 2015. It is projected that this number will continue to increase with students attending multiple graduations and new students graduating for the first time.

Figure 2: Number of graduating students for the three graduation periods



Learning destinations

There are currently 180 Learning Destinations across wide geographical location, many of which offer more than one accredited CUA activity. These cover activities including sports and physical activity, science, art and craft, and large public destinations such as museums and the Adelaide Zoo. Additionally, CUA offers downloadable school holiday activities that students can do by themselves to earn credit once ratified by their school. Some schools in conjunction with CUA also offer school holiday programs at the University of Adelaide. When taken as a whole, between these holiday activities, the large number of Learning Destinations, and activities that schools are able to run, there is a large variety of activities for students to participate in towards their Passport to Learning.

What did we do?

The National Centre for Vocational Education Research (NCVER) was contracted in 2015 to provide an evaluation of CUA. Due to the initial timeframes of the evaluation there was no possibility to develop baseline data or track participants over time. Hence, the research is a 'snap shot in time' which limits the capacity to make clear causative arguments. To counteract this research limitation we have triangulated feedback from students, parents and teachers on the various issues using a mixed methods approach. Additionally we attempted to tap into existing data sets which would provide a more longitudinal framework (school attendance, academic performance and behavioural issues). Due to lack of centralised tracking and difficulties in extracting information from the particular and idiosyncratic school based systems it only proved possible to get limited longitudinal attendance data.

The evaluation consequently involves four data streams:

- Surveys (students, parents, teachers)
- Focus groups and interviews (students, parents, teachers)
- Existing data analysis (school attendance data)
- Graduation ceremony data capture (attending parents and students)

The current evaluation is focussed on the Passport to Learning and excludes the developing Passport to Volunteering, a specific review of Learning Destinations or a review of the general approach of Children's University as the model is well established overseas.

Two student surveys were used: a longer version for older students (years 6-9) and a cut-back version for younger students (years 3-5) which were approved by CUA. Surveys were delivered as part of a validated *Research and Psychology* CUA learning activity developed by the evaluators. The survey was read out as part of this activity to help limit comprehension difficulties.

Full details of the materials used and recruitment strategies are available in the full Final Report. Ethical review was provided by the University of Adelaide's Human Research Ethics Committee and approval by DECD and Catholic Education South Australia was also provided. Not all data captured as part of the evaluation is provided in this summary document but everything is included in the full evaluation report.

Full report

A full evaluation report (Full Report) including all aspects of the four data streams was prepared and presented to the CUA office. This report is a summary of the Full Report and as such includes only key aspects of the full report.

Participating schools

Eight schools agreed to participate in the full evaluation with an additional school disseminating surveys to parents and teachers only (not students).

When examining the schools that participated in the CUA evaluation, we see that for both DECD and Catholic and Independent schools the ICSEA is lower than the overall participating schools, and the percentage of students in the most disadvantaged quartile is higher. The average ICSEA ratings show that both the DECD (925.3) and Catholic and Independent schools (993.7) are below the Australian average

(1000). The schools that participated in the evaluation are therefore not representative of the schools participating in the program, but are highly representative of the low Socio-Economic Status schools which are a recruitment focus for the program.

Table 2: ICSEA data by school sector for schools participating in the evaluation[1]

DECD schools		Catholic and Independent Schools	
ICSEA			
Average	925.3	Average	993.7
Median	917.5	Median	995
Percentage of students in the most disadvantaged quartile			
Average	54.8%	Average	30.7%
Median	57.5%	Median	31.0%

[1]: Note that minimum and maximums have not been provided as they were deemed too identifying for the schools in question.

What does CUA do for students?

Future aspirations and disruptions

A primary goal of CUA is encouraging aspirations for higher studies. There is limited data available on current levels of aspirations amongst disadvantaged Australian students. The only paper the authors are aware of uses the Aspirations Longitudinal Survey (ALS) (Gore et al, 2015). This NSW study has a fully representative sample across the age ranges, though it does not provide information by SES level. This paper ranks desired occupations, using the AUSEI06[2], from 0 to 100 where the highest socioeconomic occupations are represented by 100. Additionally they examine what type of education is required for this occupation.

When ranking CUA student's reported job aspirations at age 25, using ANZSCO[3] and the AUSEI06 (McMillan, Beavis, & Jones, 2009), we find that older (mean = 72.7) and younger (mean = 66.0) students aspire to occupations in the top half of the ranking. As shown in Table 3, the majority of occupations reported by CUA students require university education. Overall 73.8% of older and 61.7% of younger students reported occupations requiring university education, compared to the 59% reported in ALS (Ellis et al, 2016). Considering the ALS includes higher SES groups, shown to be related to higher aspirations, this makes the CUA findings all the more significant. However, 6.6% of older and 16.5% of younger students reported occupations that did not need any further education, which is higher than the 3% in ALS. As ALS data is not broken down by age it is unclear if this result may be reflective of a general trend of younger students wanting occupations not requiring further education.

Table 3: Education level required for occupations aspired to by students[1]

	Older			**Younger**		
	Male	**Female**	**Total**	**Male**	**Female**	**Total**
No further education	1 (5.0%)	3 (8.1%)	4 (6.6%)	5 (16.7%)	10 (15.6%)	19 (16.5%)
Vocational education and training	8 (40.0%)	3 (8.1%)	12 (19.7%)	8 (26.7%)	11 (17.2%)	25 (21.7%)
University	11 (55.0%)	31 (83.8%)	45 (73.8%)	17 (56.7%)	43 (67.2%)	71 (61.7%)

[1]: Note the totals for this table include students where gender was unknown. This table excludes students with missing data or where the response was indecipherable.

Students were asked for their aspirations for study, with the majority of younger (73.8%) and older (83.7%) students reporting that they now want to do more study after finishing high school. However, 81.0% of older students reported that they already wanted to do more study prior to their involvement in the CUA program. Neither question differentiates between further education types; therefore it is difficult to determine whether the nature of these aspirations has changed or remained stable. The most common response for both younger (36.6%) and older (58.1%) students for their study plans was university.

Students were more likely to report an occupation requiring university education (65.9% of students whom reported a desired occupation) than actually wanting to attend university (48.2% of all students who provided an answer). Some students may be unaware of the educational requirements of their aspired occupation.

[2] Australian Socioeconomic Index 2006.

[3] Australian and New Zealand Standard Classification of Occupations, 4 digit level; we acknowledge the Aspirations Longitudinal Study team at the University of Newcastle for the use of their Macro in coding the results to these questions.

Table 4: Student educational plans

	Student Group	No study	Don't know	TAFE or apprenticeship	University	Missing
Study plans after high school	Younger	18 (13.4%)	40 (29.9%)	13 (9.7%)	49 (36.6%)	14 (10.4%)
	Older	2 (2.7%)	18 (24.3%)	8 (10.8%)	43 (58.1%)	3 (4.1%)

As part of the focus groups, nearly all older students described how they would like to study at university in the future. One of the younger focus groups discussed future study and all either wanted to study at university or weren't sure yet. To the best of their knowledge all bar one of the participants from both the younger and older focus groups would be the first in their family to study at university.

Many parents (42.8%) and teachers (40.0%) reported increases in students talking about their future education aspirations, while no parents or teachers reported a decrease since the students have started CUA. This may underestimate the number of students that are more aware of their future education aspirations as awareness will not always translate into observable behaviour. Approximately two thirds of teachers (68.0%) reported that students seem to be more aware of their future study options. Teacher qualitative feedback also discussed that CUA makes students more aware of their learning pathways after school.

Related to this, students report that they have met adults that have shown them different things they could be, with 85.9% of younger and 87.9% of older students agreeing to this. Some parents (17.9%) disagree that their child is finding adult role models through the program, but nearly half (46.4%) agreed. No teachers disagreed that students are finding adult education and career role models, with 76.0% agreeing that students are. Overall it seems that through CUA many students are finding adult role models for future work or study options.

On balance and particularly given the comparison with the ALS data CUA involvement has increased university aspirations amongst this disadvantaged population.

Global assessments

All parents agreed that CUA is a good program, with 75% strongly agreeing to this statement. Additionally, all teachers believed that CUA was a positive addition to their school, with 80% strongly agreeing. In terms of CUA benefiting the child, only one parent neither agreed nor disagreed with this statement, whilst over half strongly agreed (none disagreed). Similarly, all teachers agreed CUA was of benefit, with 76% strongly agreeing. Parents and teachers all agreed that students look forward to CUA, with 71.4% of parents and 60.0% of teachers strongly agreeing. Tellingly, all parents who answered the question would recommend CUA to other parents. These positive reviews reflect students' reports on CUA.

Both student groups are highly engaged with CUA, with 97.0% of younger and 98.7% of older students agreeing that CUA is fun. There was a statistical difference between student groups, with younger students reporting higher 'YES!' ratings[4] for CUA being fun ($U=5704$, $Z=2.75$, $p<0.01$, $r=0.19$), with a small effect size[5]. Whilst older students believe CUA is fun, younger students get more enjoyment out of it. This

[4] A 4-point scale was used for many of the items in the student surveys. Students were asked to report 'YES!' if they strongly agreed with a statement, 'yes' if they agreed, 'no' if they disagreed and 'NO!' if they strongly disagreed. This was described using flash cards; further details and all materials can be found in the attachments to the Full Report.

[5] Statistical analysis shows the probability, 'p' value, of an observed difference being the result of chance rather than reflecting differences in the actual population. We accept findings as being genuine where this probability is 5% or lower; $p \leq .05$. This however only tells us that an observed difference is real, it does not describe the scope or size of this

may be an artifice of maturation and younger children being more excitable. Additionally, older students see CUA as interesting (94.6%) and reject the notion of it being a waste of time (94.6% saying it was not). Older students also report feeling supported at CUA (93.2%).

Table 5: Students engagement with the program

CU is:	Student Group	NO!	no	yes	YES!	Missing
Fun	Younger	0 (0%)	2 (1.5%)	24 (17.9%)	106 (79.1%)	2 (1.5%)
	Older	0 (0%)	1 (1.4%)	27 (36.5%)	46 (62.2%)	0 (0.0%)
Interesting	Older	0 (0%)	4 (5.4%)	39 (52.7%)	31 (41.9%)	0 (0%)
A waste of time	Older	52 (70.3%)	18 (24.3%)	2 (2.7%)	1 (1.4%)	1 (1.4%)
I feel supported	Older	0 (0%)	4 (5.4%)	33 (44.6%)	36 (48.6%)	1 (1.4%)
I would recommend	Younger	6 (4.5%)	8 (6.0%)	36 (26.9%)	80 (59.7%)	4 (3.0%)
	Older	5 (6.8%)	2 (2.7%)	30 (40.5%)	35 (47.3%)	2 (2.7%)
Thinking of stopping	Younger	108 (80.6%)	11 (8.2%)	5 (3.7%)	7 (5.2%)	3 (2.2%)
	Older	46 (62.2%)	16 (21.6%)	6 (8.1%)	4 (5.4%)	2 (2.7%)

The majority, 86.6%, of younger and 87.8% of older students would recommend the CUA program to others. Student's qualitative feedback discussed that younger students may not talk about CUA as it was seen as not fair bragging about their passports to students that don't have one, because these other students can't join. Similarly, it was 'unfair' to tell other students about activities which they can't participate in. Hence, these still very high responses may be lower than other responses due to compassion rather than perceived lack of program desirability.

The positive perception of CUA is reflected in low numbers of students thinking of stopping CUA participation (8.9% of younger and 13.5% of older students). This is a statistically significant difference between the groups ($U=3882$, $Z=-2.85$, $p<0.01$, $r=0.20$), though a small effect size. While low, considering the highly positive perceptions of the program these numbers, particularly for the older students, may be higher than expected. Students can participate in CUA Passport to Learning until they are 14 years old. One older student wrote "too old" next to a *yes* response to the question *I am thinking of stopping*. As some of the schools in the evaluation do have students older than 14, this may indicate the student has reached the highest age for CUA, or they perceive themselves as too old for the program or activities.

Inclusivity of the program

There is a concern that as an extra-curricular learning activity CUA may only appeal to those already engaged with education and of a more academic inclination. However, only 12% of teachers agreed that it was the 'brighter students' who join CUA. Similarly only 12% agreed that only the brighter student continue with the program, with 28% disagreeing and 44% neither agreed nor disagreed. This indicates that CUA is reaching and accessible to students with a broader range of academic abilities. As discussed by a

difference. Effect size (shown with the 'r' statistic) is a measure of the scope of this difference and is determined as small, medium or large by statistical rules of thumb.

teacher, “We’ve got quite a range of different intellectual abilities that participate… some of the kids you might not expect to do so well within a classroom setting, they really thrive at Children’s University”.

Teacher qualitative feedback discussed that a wide range of younger students join CUA, but older students are more reticent. Potentially CUA may not be ‘cool’ for older students; however teachers agreed that younger students continue with CUA as they age. Teachers felt encouraging engagement with education and school for younger students was more important than attempting to reengage disconnected older students. CUA staff confirm that the program is not specifically designed to engage the disengaged. However, a focus on younger students may potentially help to prevent or at least delay such disengagement.

Teachers were asked in the survey whether there are some students that CUA doesn’t work as well for and if so, what are the characteristics of these students and how could the program adapt to better meet their needs. Approximately half of teachers (52.0%) reported that there aren’t students the program doesn’t work as well for, while 28.0% identified some at need groups: students with behavioural and learning problems, disengaged students and students potentially lacking maturity or genuine interest. As one teacher reports “Those who are disengaged with learning wouldn’t be interested in joining – as it is all voluntary based”. A student’s family was also reported as a barrier as lack of interest can limit student’s capacity to attend learning destinations.

This is a positive finding; CUA is reported as being typically effective across a range of students with diverse academic abilities barring groups with already identified concerns which would likely require specific targeted intervention, such as behaviour, intellectual, maturity and family background issues. CUA is not designed for, or aiming to, provide a counsellor or pastoral care type function.

When working in disadvantaged areas CUA fees may be a barrier to participation. Fees vary slightly by school, depending on the number of school card holders but are typically in the range of $10 to $25. Schools may choose to absorb some or this entire fee for some or all students. Hence, fees can vary between schools. Only 14.3% of parents surveyed agreed and none strongly agree that it can be difficult to pay the annual fee. Just over a quarter (28.0%) of teachers felt that the annual fees can be difficult for the typical parent of their students. This suggests that the pay structures established by CUA are generally appropriate but teachers may be seeing some students that are unable to participate due to fees.

Program engagement

The CUA program is launched in schools through an assembly where a CUA staff member introduces the program to students; schools are able to request re-launch assemblies as needed. Teacher qualitative feedback stated launch and re-launch assemblies were highly useful in recruiting and motivating students to participate, although one school reported success in conducting their own CUA re-launch. One difficulty of these assemblies is the large amount of time required for CUA staff to conduct these, with some teachers reporting they would like to have re-launched but didn’t request help, while others stated that they would like to have started earlier but couldn’t secure a CUA staff member until later in the year. Teachers report as schools move into their second year of CUA and beyond, word of mouth recruitment is occurring. Demand is such that one school reported using a wait-list to manage interested students for their next intake.

As a voluntary program, it is important that students don’t feel forced to participate. Most of the teachers surveyed (72.0%) agree and none disagreed that it is up to the child to decide to be involved in CUA (Table 6). Teacher surveys showed generally more support to not push children to participate (44.0%) than there is to push them (24.0%). This could be further investigated as 44.0% of teachers surveyed either thought

reluctant students should be pushed or neither agreed nor disagreed. How 'push' was interpreted by respondents may be questioned, with one teacher writing "encouraged!" next to their agree response.

Table 6: Teacher perceptions on student engagement with CUA

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Missing
It's up to the students to decide if they want to part of it	0 (0.0%)	0 (0.0%)	4 (16.0%)	13 (52.0%)	5 (20.0%)	3 (12.0%)
Teachers should push reluctant kids to be part of it	5 (20.0%)	6 (24.0%)	5 (20.0%)	6 (24.0%)	0 (0.0%)	3 (12.0%)

Positively, the vast majority of both younger (91.0%) and older (90.5%) students agreed it was their choice to continue. Younger students reported stronger agreement with this statement than older students ($U=5491$, $Z=2.52$, $p<0.05$, $r=0.18$), though the effect size was small so there is a slight tendency for younger students to feel participation is more their choice. The majority of younger (76.8%) and older (93.2%) students reported it was their choice which activities they participated in. There was a statistical difference between groups, with older students reporting higher agreement ($U=3650$, $Z=-2.95$, $p<0.01$, $r=0.21$). However, this is still a small effect size.

A reasonable sized group of younger (23.1%) and older (36.5%) students agreed that they would want to stop CUA if they couldn't choose their activities. This was a statistically significant difference ($U=3825$, $Z=-2.63$, $p<0.01$, $r=0.18$) with fewer younger students reporting they would want to stop. Hence, whilst younger students are more likely to report they don't have control over which activities they attend, they are less likely to be put off by this. Also, this is a hypothetical question with actual student behaviour needing to be confirmed with longer term tracking studies.

Table 7: Student perception of choice

	Student Group	NO!	no	yes	YES!	Missing
My choice to keep doing it	Younger	5 (3.7%)	3 (2.2%)	20 (14.9%)	102 (76.1%)	4 (3.0%)
	Older	2 (2.7%)	4 (5.4%)	22 (29.7%)	45 (60.8%)	1 (1.4%)
I choose which activities I go to	Younger	10 (7.5%)	15 (11.2%)	35 (26.1%)	68 (50.7%)	6 (4.5%)
	Older	3 (4.1%)	1 (1.4%)	16 (21.6%)	53 (71.6%)	1 (1.4%)
If I couldn't choose which activities I go to I'd want to stop	Younger	75 (56.0%)	25 (18.7%)	11 (8.2%)	20 (14.9%)	3 (2.2%)
	Older	28 (37.8%)	19 (25.7%)	8 (10.8%)	19 (25.7%)	0 (0%)

Rewards

Rewards are an integral component of CUA both in terms of passport stamps and the celebration of achievement in the graduation. The importance of passport stamps was confirmed with parents (89.3%), teachers (96%), younger (87.4%) and older students (90.5%) agreeing that passports stamps are important. For students, the stamps "Makes me feel good because I've achieved another hour or minute in my

passport". A greater percentage of younger students (68.7%) compared with older students (41.9%) said that YES! stamps are important, a statistically significant difference (U=6008, Z=3.39, p=0.001, r=0.240), though still a small effect size, suggesting younger students may place a higher value on stamps. This was confirmed through focus group work with younger students agreeing they would do a boring activity just to get a stamp, "I need to get them hours". In contrast, only a few of the older students said they would do a boring activity to get a stamp.

Teacher feedback regarded stamps as being visual progress and a good record of program involvement (50%). Other reasons included being a motivator and giving students a goal to work towards (27.3%) and as a reward and recognition of progress (22.7%).

The passport stamp is a record of hours, and a small reward but completing activities is the true positive outcome. For the older students the stamps seem to be serving this purpose. Although the younger students focus on the stamp more than the activity, this does seem to be a motivating factor in encouraging some students to try new activities, "My Mum said 'start doing more, all of them, just to have a see how they are.' But I like them all". She realised she liked the activities after doing them for stamps, which fulfils the aim of the program of getting students to try new things. The motivation of stamps diminishes when students have to wait to get stamps, when CUA co-ordinators are required to stamp external activities. This was leading to some frustration and confusion for children and parents.

The graduation ceremony is the celebration of work from the students and schools participating in the program, this also helps familiarise students and their families with the university. Graduation was seen as important in all feedback, younger (92.5%) and older students (89.2%), parents (89.3%) and teachers (100%). Similar to stamps, a statistically significant (U=5850, Z=3.66, p<0.001, r=0.26 – approaching a medium effect size), greater percentage of younger (81.3%) than older (59.5%) students said that YES! graduation was important. Unfortunately, student focus groups do not indicate why this may be though it is likely to reflect the more excitable nature of younger children. Students at graduation also agreed (92%, with 86% strongly agreeing) that looking forward to graduation had kept them involved in the program.

Why graduation is important, the most frequent response for both parents (57%) and teachers (55%) was acknowledgment and recognition of participation and achievement: "The graduation ceremony allowed formal recognition of effort and accomplishment". Additionally, there was a motivational factor reported by parents (27%); "She is looking forward to wearing a gown + hat + graduating in front of family and friends" and teachers (24%), "They look forward to it, and are engaged in their learning in order to attend graduation". The graduation therefore acts both as recognition for hard work, and a motivator to do this work. Other benefits included emphasising the link between graduation and further education or careers, and the University of Adelaide (reported by parents, 14% and teachers, 5%) and parents (23%) reported a positive boost in self-confidence, "A sense of achievement and more confidence in all areas of her life. It was a very positive experience".

Younger students agreed in focus groups that graduation is fun, and a celebration of how many hours you have and how hard you have worked; "Graduating was my most favourite thing of Children's University". They enjoy the specialness of the occasion: "It's really awesome, you get to wear caps and gowns, and then get awards". Students that have not yet graduated are aiming to graduate and are excited, and students that had graduated report they definitely wanted to do so again. This reflected data gathered at the graduation which typically focussed around phrases such as happy, proud, excited and special. Comments also included reference to the effort required to achieve graduation, for example, "Proud because I worked hard and earned it" and "Today's graduation made me feel great about myself because

it told me that if you give 100% effort you will be rewarded greatly". Additionally, several students reported that the graduation ceremony had motivated them to "do it again it was AMAZING" and "I can't wait to do it next year". Some responses (11.9%) included reference to nerves or embarrassment, however, this is not a concern as being the centre of attention in front of their peers and families can be confronting for young children and also there is the potential that student's maturation levels may impact on their ability to process and describe high arousal states. Focus group participants who had graduated were quick to describe to other students how their nervousness about graduated quickly evaporated once they were involved.

The stamps and graduation are part of goal setting. Less than 5% of students and no parents reported their child not aiming to graduate. The goal setting nature of the CUA program, where students can set their own goals and work towards them at their own pace with no immediate failures (since they can continue earning stamps towards a future graduation ceremony) feeds in to the teacher report that students are developing perseverance and grit. Key features of grit and perseverance are having goals and working towards them over time and despite hurdles. Students are able to set these goals for themselves in a safe environment with limited chance of failure, other than stopping the program, which may help develop these characteristics.

What does CUA do for schools?

Student impact

Students, parents and teachers were asked about the impact of participating in CUA on attitudes and behaviours at school. The majority of younger (70.9%) and half of older (51.4%) students reported that they have enjoyed being at school more since starting CUA. This is a statistically significant difference ($U=6004$, $Z=3.65$, $p<0.001$, $r=0.26$), approaching a medium effect size, with younger students reporting higher yes responses. Responses of those who had not liked being at school more (24.6% younger, 47.3% older) should not be interpreted as CUA decreasing enjoyment of school. There was no qualitative feedback to suggest this from teachers, students or parents so this data should be interpreted as enjoyment of school remaining stable from pre-CUA levels.

No parents reported an increase in their child complaining about going to school, while 14.3% reported a decrease since their child had started CUA (see Table 8). Similarly, no parent reported a decrease in enjoying school, while 39.3% reported an increase since starting CUA. For some students their attitude to and enjoyment of school has improved since starting the CUA program, whilst for others their participation in CUA hasn't changed school for them.

Table 8: Parent perceptions of changes in child attitudes to school

	Greatly decreased	Decreased	No change	Increased	Greatly increased	Missing
Complaining about going to school	1 (3.6%)	3 (10.7%)	24 (85.7%)	0 (0%)	0 (0%)	0 (0%)
Enjoying school	0 (0%)	0 (0%)	17 (60.7%)	7 (25.0%)	4 (14.3%)	0 (0%)
Talking about things learnt	0 (0%)	0 (0%)	5 (17.9%)	18 (64.3%)	5 (17.9%)	0 (0%)

The majority of parents (82.2%) reported that their child now talks more about things they have learnt, while no parents reported a decrease since their child started CUA (Table 6). Just over half of parents (53.5%) agreed that their child is more likely to talk about CUA than school.

The teacher perceptions of students' engagement with school and learning mirror those of students and parents. No teachers reported decreases in enjoying school or interest in learning. The majority of teachers reported an increase in students enjoying school (60%) and having an interest in learning (68%) since joining CUA.

More teachers (40%) reported no change in appropriate classroom behaviour than an increase (36%). We do not know what classroom behaviour was like prior to CUA, or what the behaviour is like now. Hence, some students may have had good classroom behaviour prior to joining CUA and are therefore likely not to have changed, whilst other students may have had more room for improvement. Teacher qualitative feedback reports that whilst a wide range of students join CUA, the majority tend to have pre-existing reasonable classroom behaviours with students with severe behavioural problems tending not to join. Similarly, a third (32%) of teachers reported an improvement in the quality of school work from CUA students. Noting that CUA is not designed to improve behaviour or school work, this impact on approximately a third of participants is pleasing.

Table 9: Teacher perception of student changes

	Greatly decreased	Decreased	No change	Increased	Greatly increased	Missing
Enjoying school	0 (0%)	0 (0%)	4 (16%)	12 (48%)	3 (12%)	6 (24%)
Interest in learning	0 (0%)	0 (0%)	3 (12%)	14 (56%)	3 (12%)	5 (20%)
Appropriate class room behaviour	0 (0.0%)	0 (0.0%)	10 (40.0%)	8 (32.0%)	1 (4.0%)	6 (24.0%)
Change in quality of school work	0 (0.0%)	0 (0.0%)	11 (44.0%)	8 (32.0%)	0 (0.0%)	6 (24.0%)

Regarding self-confidence, the majority of older students (78.3%) agreed that their confidence had improved, whilst 68.0% of teachers and 57.2% of parents agreed to this. Lower reports from teachers and parents may reflect confidence being confined to specific activities or the CUA 'space' or increased feelings are not translating into increased displays of self-confidence. Just under half (48%) of teachers reported increases in students being more likely to stick with hard problems since starting CUA, an indicator of perseverance. No teachers reported a decrease. Teacher qualitative feedback also highlighted CUA helping to develop other positive personality characteristics, such as perseverance, independence and resilience. Additionally, one teacher stated that the program has "been good I think in those other skills, of just time and management and planning and being responsible. I've found it has those side benefits".

Over half (67.9% of younger and 51.4% of older students) of all students reported making new friends as a consequence of their involvement in CUA. This is a statistically significant difference ($U=6488$, $Z=4.09$, $p<0.001$, $r=0.28$), approaching a medium effect size. This is likely related to the fact that there are typically more younger students in CUA than older. Hence, there are more opportunities for younger students to meet new people. In a similar vein, younger students are more likely to report sitting or talking with new people at school (70.9% vs. 46%). This is a statistically significant difference ($U=6288$, $Z=4.09$, $p<.001$, $r=0.29$), approaching a medium effect size.

Half of the parents surveyed (50.0%) reported that their child had made new friends as a consequence of involvement in CUA, while 64.0% of teachers reported changes in student peer networks. Of the 16 teachers that reported changes in peer networks, 68.8% reported these changes as positive and none reported it as negative. Some parents (10%) and teachers (11%) also reported that changes in peer groups and relationships were one of the main strengths of the CUA program; "Children are mixing with other ambitious or motivated chn (children)". Teacher qualitative feedback discussed peer group issues as a positive aspect to the program, directly benefiting the child and encouraging students to participate in CUA. One teacher reported that "I think it's the social side of it that they enjoy as well, so it's not just the learning but getting to interact with other kids who they may not get to see all the time".

Impact of CUA on school attendance was seen as a potentially important program outcome. As centralised attendance data is limited in South Australia the evaluation attempted to gain attendance data from individual schools but encountered a series of problems which were often insurmountable.

Two schools were able to provide us with information on the attendance of CUA and non-CUA students. One school reported the average number of days students missed in a term for CUA students prior to starting the program and after participating for a year, while the other school reported the average

percentage of days attended in the term for CUA and non-CUA students prior to starting and after participating for 6 months.

The school reporting data across a year typically had very consistently high attendance across year levels prior to beginning the program, with CUA students reporting only an average 0 to 1 day absent per term. Hence, there was no scope for positive change in attendance which may reflect CUA impact on engagement with the school. However, for the year level of students at this school that averaged more than 5 days absent in the term prior to starting CUA this decreased to 0 days average absent per term after participating in the program.

Looking at the second school, with six month data, we see a difference between CUA and non-CUA students. Prior to starting the program CUA student's already averaged 3% higher attendance (number of days at school) than non-CUA students. After six months this had increased to 5.6% higher attendance than their non-CUA peers in the same period of time.

Teacher impact

The often heavy workload of teachers and school staff can mean that any additional program such as CUA can be seen as an extra burden. A total of 48% and 44% of teachers reported an increase in teaching workload and administrative tasks, respectively due to CUA, slightly exceeding those reporting no change (40% on each dimension).

Table 10: Teacher reported changes in workload

	Greatly decreased	Decreased	No change	Increased	Greatly increased	Missing
Teaching workload	0 (0%)	0 (0%)	10 (40%)	11 (44%)	1 (4%)	2 (12%)
Admin tasks	0 (0%)	0 (0%)	10 (40%)	10 (40%)	1 (4%)	4 (16%)

All teachers in focus groups or interviewed reported their principals as being highly supportive of CUA and allowing time and resources to run the program. School CUA coordinators reported time to complete administration for the program could be burdensome, however each of the coordinators we talked with had been allocated specific time by their principal for this, a move praised by all coordinators. Administrative support from the school was also considered an important addition by one coordinator who reported one of the schools administrative staff was given time to assist on the program, greatly reducing the pressure. The administrative burden for CUA is mostly internal administration in relation to tracking passport stamps, organising school based activities, and advertising the program internally. Both administration support and specific program time for CUA coordinators are recommended by CUA during enrolment of new schools.

Teachers' qualitative feedback included reported problems, 35.7% of which concerned workload: "Activities I run are done in my own time on top of my normal teaching load" and "Fitting it in to my own class timetable, tricky". Successful suggestions included that "Teachers taking lunch time activities in lieu of yard duty" and similar initiatives helped with some of these issues and in recruiting additional staff to participate. Some schools also found ways to get students participating in an activity that was also useful for the staff, for example a gardening club where students help maintain school gardens. The problem of finding enough staff to support activities was also discussed with one teacher reporting that they have difficulty "Finding staff to supervise all the activities we want to run". There were also reports of teachers being enthused about CUA but not wanting to run activities or finding it difficult to find the

time to do so. Budgetary concerns and resourcing for materials was raised as a problem (21.4%) for some teachers running CUA activities, “Limitations of resources of the area suitable to share with primary students”, while another stated that it would be good to have a “Budget provided from school for CU activities”.

Hence, for some schools though not the majority, there are workload and associated budgeting issues with CUA. However, some of this may reflect points discussed above regarding the intention for CUA to not simply be a school program but to encourage students to participate in Learning Destinations outside of schools.

In summary we see that CUA is having the ancillary benefit of improving behaviour at and liking of school for a proportion of its participants as well as self-confidence and potentially resilience. Also, whilst the data is limited, there is a suggestion that CUA involvement may be positively impacting on school attendance even given that CUA students may be presenting with existing higher attendance levels. As an additional program to the school, involvement in CUA does impact on teacher’s time and workloads, however, there are potential strategies to moderate this impact and no qualitative feedback discussed that the requirements were considered excessive or a factor in encouraging a school to leave the program.

What does CUA do for the university?

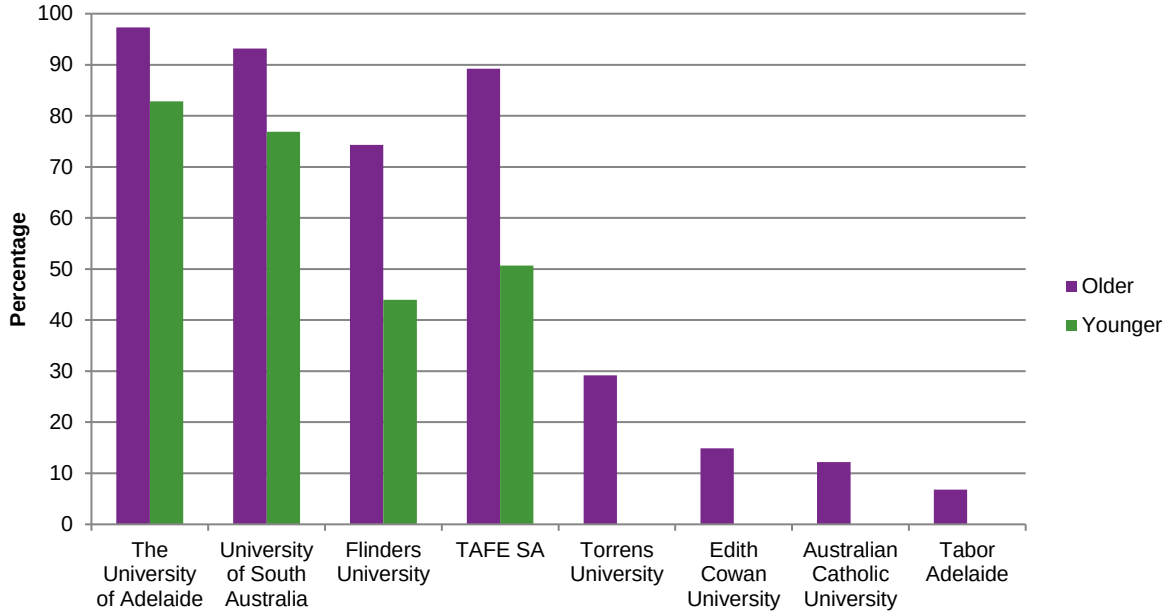
There is a cost in administrating the CUA program so consequently we have examined the potential return for the hosting university. The University of Adelaide runs CUA and students are exposed to both CUA and University of Adelaide branding. Students in the survey were shown names and logos of several further education institutions that are active in Adelaide. Younger students were shown institutions they may have heard of: the University of Adelaide, Children's University, the University of South Australia, Flinders University, and TAFE SA. Older students additionally saw: Torrens University, Australian Catholic University, Tabor Adelaide, and Edith Cowan University. Results are shown in Table 11.

Brand awareness for the University of Adelaide was very high, with only CUA branding being more recognisable. As shown in Figure 3, The University of Adelaide was more recognizable to both older and younger participants than any other SA further education provider, including TAFE SA and the University of South Australia who typically have a strong presence in the regions studied.

Table 11: Student awareness of the Children's University and The University of Adelaide brands

	Student Group	NO!	no	yes	YES!	Missing
Adelaide University	Younger	14 (10.4%)	5 (3.7%)	12 (9.0%)	99 (73.9%)	4 (3.0%)
	Older	1 (1.4%)	0 (0%)	3 (4.1%)	69 (93.2%)	1 (1.4%)
Children's University	Younger	1 (0.7%)	0 (0%)	8 (6.0%	121 (90.3%)	4 (3.0%)
	Older	0 (0%)	2 (2.7%)	2 (2.7%)	69 (93.2%)	1 (1.4%)
University of South Australia	Younger	17 (12.7%)	10 (7.5%)	17 (12.7%)	86 (64.2%)	4 (3.0%)
	Older	4 (5.4%)	1 (1.4%)	6 (8.1%)	63 (85.1%)	0 (0%)
Flinders University	Younger	45 (33.6%)	26 (19.4%)	14 (10.4%)	45 (33.6%)	4 (3.0%)
	Older	15 (20.3%)	3 (4.1%)	12 (16.2%)	43 (58.1%)	1 (1.4%)
TAFE SA	Younger	50 (37.3%)	12 (9.0%)	9 (6.7%)	59 (44.0%)	4 (3.0%)
	Older	5 (6.8%)	2 (2.7%)	11 (14.9%)	55 (74.3%0	1 (1.4%)
Torrens University	Older	46 (62.2%)	6 (8.1%)	13 (17.6%)	9 (12.2%)	0 (0%)
Australian Catholic University	Older	54 (73.0%)	10 (13.5%)	4 (5.4%)	5 (6.8%)	1 (1.4%)
Tabor Adelaide	Older	54 (73.0%)	13 (17.6%)	2 (2.7%)	3 (4.1%)	2 (2.7%)
Edith Cowan University	Older	54 (73.0%)	7 (9.5%)	6 (8.1%)	5 (6.8%)	2 (2.7%)

Figure 3: Higher education brand awareness



As discussed above, student focus group participants whom had decided on post school options all wanted to study at University. All bar one stated Adelaide University as their preferred study destination (the remaining student would like to study at Adelaide but may go to an interstate university where her mother studied). Tellingly, all the students that had experienced a graduation ceremony wanted to study at university and for this to be at Adelaide University.

Perceived barriers to future study were identified for older students. On average, participants raised nearly two (1.93) reasons which might prevent them from doing more study. Their responses are displayed in Table 12 in order of frequency.

Table 12: Reasons why older students felt may stop them studying post school

Factor	N[1]
It costs too much money	36 (50.0%)
Nothing would stop me	30 (41.7%)
It is too hard to get into	20 (27.8%)
It is too far away from home	19 (26.4%)
I need to go to work	15 (20.8%)
I would find doing study too hard	10 (13.9%)
Study is not useful for what I want to do	6 (8.3%)
Other	3 (4.2%)

[1]Note: Two students did not answer so the total sample of older students for this question is 72.

Financial hardship is clearly already very salient for the students sampled, with half reporting cost of university and a fifth that they may need to work. While 30 (41.7%) of students stated that nothing would stop them from doing more study post school, 10 of these students still provided additional responses. Hence, only 20 (27.8%) felt there were no potentially impediments at all to their pursuing further study.

Where to from here?

Taking the evaluation as a whole there are a number of challenges and opportunities facing CUA as it continues to grow in the context of limited resources. Securing ongoing support is important for the program to continue working and to implement continuous improvement across key areas.

Information systems

A clear deficit to emerge through the process of the evaluation was information and tracking systems. Currently CUA staff have limited information on who is participating and what activities they are involved in. Some of this information was intended to be tracked through the U.K. developed e-passport system, which, unfortunately, is problematic. A fully functional and integrated system for collecting student information and tracking student engagement would strongly benefit the program. This would meet the needs for CUA staff in understanding the uptake and use of the program, and in tracking patterns of activities and determining gaps in the geographical dispersion of Learning Destinations. CUA staff report that it is intending to create an online system to manage student registration and passports, however, this is dependent upon available resources.

Website and education

A consistent theme to emerge throughout the evaluation was potential lack of information or confusion on behalf of schools and participants on aspects of the program. For example, the issue of which activities could be validated was repeatedly raised, as well as broader understanding of CUA aims. Seemingly the most efficient solution to these concerns would be development of the CUA website as a central repository of knowledge or information. This would likely include specific landing pages for teachers and parents with information on commonly raised issues and FAQs. Ideally this would integrate with any information system designed to manage student participation.

Champion led and the cluster approach

As the program is not yet imbedded as 'business as usual' it was acknowledged that often key individuals drive the program at a site; acting as 'champions'. Identifying champions is a common component of many social change initiatives, however, this does introduce vulnerability into the program. If a champion moves on or 'burns out' then the program could falter in the absence of clear succession planning.

CUA staff inform schools of the time requirements needed when signing up to the program, however, it could be the duties of a CUA co-ordinator are shared. It was considered highly important by teachers that CUA coordinators are given time and/or administrative support by their principals.

Through the course of the evaluation an example was encountered of a group of schools - a 'cluster' whom were highly connected in their approach to CUA. These schools had developed a network between their CUA co-ordinators, facilitating sharing both activity ideas as well as resources. These schools also seemed less vulnerable to the loss of key personnel as they reported peers in other schools being able to 'cover' them in the case of an emergency. The evaluation team would *strongly* encourage CUA to hold discussions with this team as to their learnings and then use this as an exemplar of success to help imbed this approach more broadly amongst schools.

CUA contact with and support to schools

School staff need ongoing support from CUA to keep the program running effectively in their school. The support offered to schools includes a launch or relaunch assembly, validation training with staff, information packs including ideas for activities, and ongoing ad hoc support. School staff reported needing this support, however many did not take up many of the support mechanisms offered. A future challenge for CUA is the maintenance of these support mechanisms in the context of growth throughout the schools networks, and schools becoming more aware of what help they can request. Given the limited amount of CUA staff available to support schools, CUA need to consider alternate ways to provide support, for example, offering online support to multiple sites simultaneously or only offering training or activities as part of a 'rolling sideshow' across schools with a set timetable.

Accessing Learning Destinations and age appropriateness

Whilst not an explicit target of the evaluation there was a general impression gained that some schools felt CUA was more of a school based activity. This was also raised by CUA staff as problematic. To expose children to greater positive disruptions, CUA would like children to be engaged in more activities at Learning Destinations. This also alleviates some pressure on schools to develop new activities. Currently the majority of students engaged in CUA are younger, however, as they develop through the program it is important that the Learning Destinations and school activities can provide age appropriate tasks. Attempting to encourage students to engage more with external learning destinations is an ongoing challenge.

What's the take away message?

The current evaluation is based on data from primarily low-SES schools, which are also a focus of the CUA program. It must be noted, however, that as program uptake in higher SES schools has increased, our sample is not representative of this. The growth of the CUA program has been large and rapid, resulting not only more coverage of schools in the program across the DECD, Catholic and independent sectors, but also in the numbers of students in geographically dispersed locations.

To improve confidence in the results of the evaluation have been triangulated to determine program effects from multiple perspectives: students, parents, and teachers. For future evaluation the use of additional data, such as student attendance records, academic performance and CUA passport data, should be examined to further extend our understanding of CUA's impact.

The evaluation has shown positive impact on students. Parents and teachers overall agreed that the CUA program was a positive addition to the school and benefited the students, while students agree that the program is fun and they didn't want to stop, they liked being at school more since joining CUA, had improved self-confidence and had greater engagement with learning. The program was seen as inclusive of students of all backgrounds and was not just for the more academically inclined.

The future work and university education aspirations of students in the CUA program are higher than expected, especially for low-SES areas such as this sample. Students are participating in a wide range of activities that promote self-directed learning, and students feel they have control over their own learning without fear of failure. The voluntary and self-directed nature of the program allows students to engage with their own learning at their own pace, while goal-setting towards passport stamps and graduation are serving as a reward and motivator.

In addition to the positive impact and benefits of the CUA program, some challenges have emerged for the program going into the future. Among these emerging concerns include CUA being able to provide support to the very rapidly growing number of new participating schools. Other opportunities for the program include encouraging students to continue their learning outside of schools, while maintaining interesting and novel activities for the emerging older aged participants.

To ensure continuous improvement of the program and growth going forward, it will be important to monitor CUA's impacts. Long term impact on education and employment outcomes will not be measurable for some years, however, as the program matures these post-compulsory schooling and employment activities will become important for evaluation. Shorter term impacts however can be continually monitored, and use of integrated online systems could aid CUA staff to undertake these monitoring and evaluation activities.

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