

Cost-benefit analysis of Hands on Learning

Methodology and key findings

January 2022

Return on Investment

The economic return of Hands on Learning is plausibly more than triple the total program delivery cost for secondary students. The threshold for achieving a positive return on investment is very low.

We estimated what it would take for Hands on Learning to break even or deliver a positive return on investment.

Every early school leaver costs government and the taxpayer \$334,000 across their lifetimes, in lost tax revenue and increased health, crime and welfare spending.¹

We estimated the number of students Hands on Learning would need to prevent from leaving school early to generate a positive investment, given their \$4.6m spend on nearly 1300 secondary school students each year.

Hands on Learning breaks even when just 14 secondary students stay in school and finish Year 12 because they participated in the program.

This is 1.1% of the total cohort of Hands on Learning.

The percentage of secondary students in who need to be prevented from leaving school early because of Hands on Learning in order to...

... **break even**, 1.1% (14 students)

... **double the investment**, 2.2% (28 students)

... **triple the investment**, 3.2%, (42 students)

Total Hands on Learning cohort

There is good reason to believe that Hands on Learning achieves at least this impact.

All students in Hands on Learning have significant risk factors for leaving school early – but data indicates high levels of success at keeping them engaged in school and transitioning into positive pathways.

81% 

of parents believe Hands on Learning is the key reason that their child has been engaged and motivated to come to school.

93% 

of students report Hands on Learning as the key reason they have been engaged and motivated to come to school.

95% 

of students were still in school, work or study according to a Hands on Learning destinations and pathways study in 2018.

Quantitative data sources: dandolo analysis of Hands on Learning student survey data, parent survey data, and school survey data (aggregated over the years 2018, 2019, 2020 and 2021), school and participant list

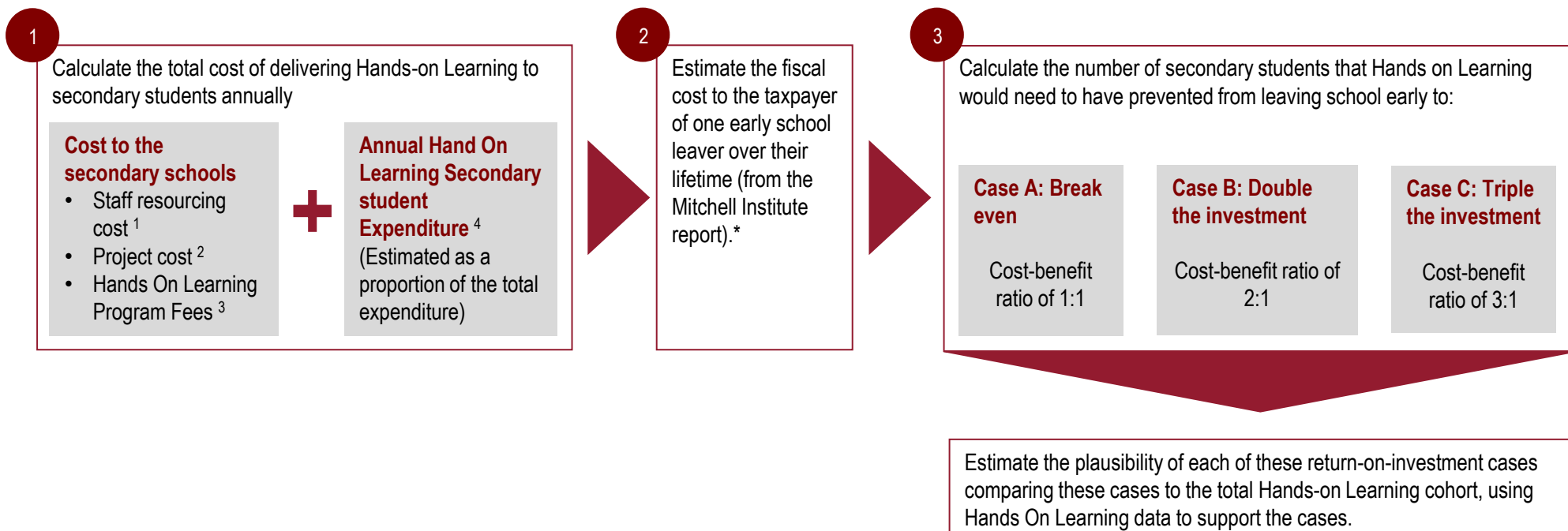
1. <https://www.vu.edu.au/sites/default/files/counting-the-costs-of-lost-opportunity-in-Aus-education-mitchell-institute.pdf>
2. Dandolo cost modelling

Methodology

The methodology quantifies the change in outcomes for secondary students derived from investment in the program and models the value of that change.

We don't have experimental data that confidently *attributes* Year 12 completion to participation in Hands on Learning. Instead, we have estimated the number/proportion of the Hands on Learning cohort who would have left school early without participation in the program in order for the program to break even or deliver a positive return on investment. The break-even point is very low (1.2% of the total annual cohort), which gives good confidence that Hands on Learning provides a strong return on investment.

There are three key stages to calculating a cost-benefit ratio:



This model takes a very conservative approach to estimating the impact of Hands on Learning and is likely to understate the full benefits of the program

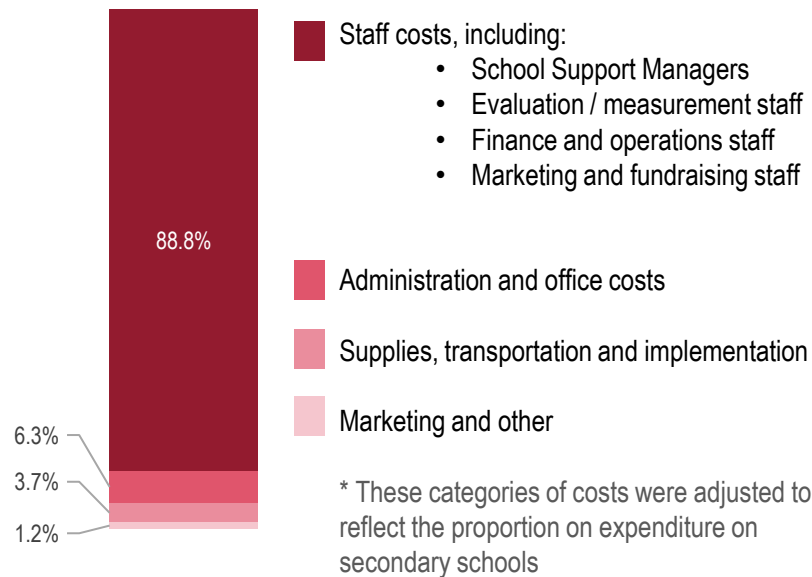
This is because:

- We are only counting the direct fiscal costs to government and taxpayers of early school leaving, not the broader social benefits that accrue to individuals from greater income, better health and wellbeing.
- The model does not estimate the additional costs saved over the lifetime of students with improved social and emotional skills and wellbeing, or any of the other broader, flow-on effects of participation in the program.
- We are only considering impact on secondary students within the model, given the more direct link between preventing early school leaving for secondary students.

Hands on Learning Cost analysis

We estimate the cost of delivering the Hands on Learning program to secondary students annually is ~\$4.6 million.

Hands on Learning expenditure* includes:

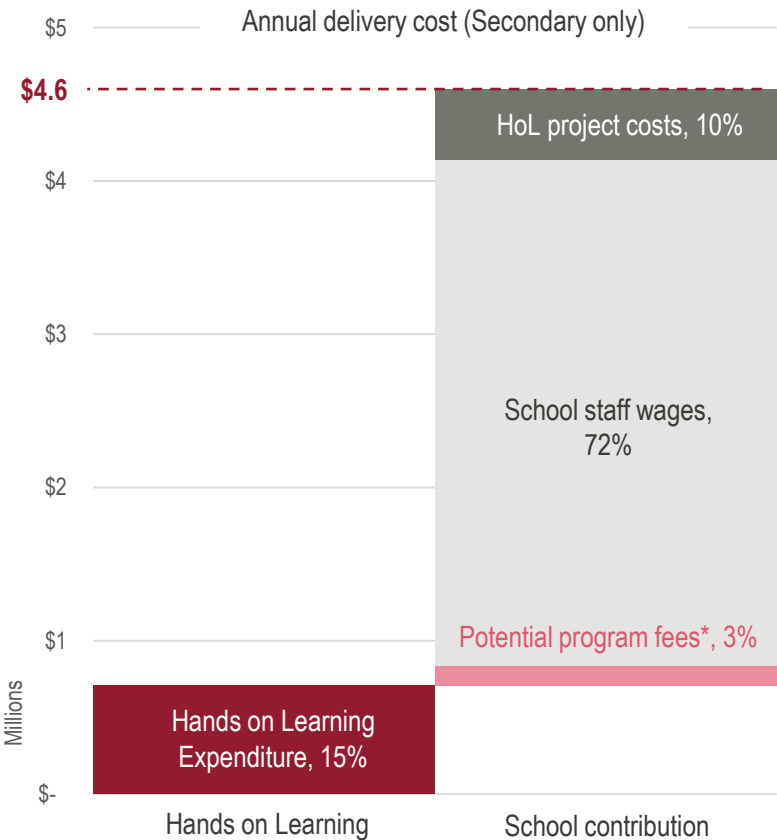


Of the total \$4.6m cost of Hands on Learning in secondary schools, only a fifth of the cost of delivery is provided by Save the Children.

Schools contribute ~ 85% of the cost of delivery to secondary students through staff wages, project materials costs and program fees to Hands on Learning (for some but not all schools).

*** Note:** For this cost model, we calculated program fees assuming all secondary schools in the 2020 school list paid the program fee. In reality not all schools paid this fee in 2020, so this number reflects the potential estimated cost to schools. See Slide 33 for a full list of assumptions.

Save the Children’s expenditure is less than a fifth of the total delivery cost of Hands on Learning



Source: dandolo cost modelling

Benefits of reducing early school leaving

There are huge costs associated with the lost opportunity of early school leaving, which is estimated to cost the government \$334,000 across one lifetime.










★ Approach

The Mitchell Institute estimates annual and lifetime (working age) costs in the areas of health, government assistance, crime, labour and employment associated with early school leaving and disengagement from full-time work and study.

There are a mix of social and fiscal costs.

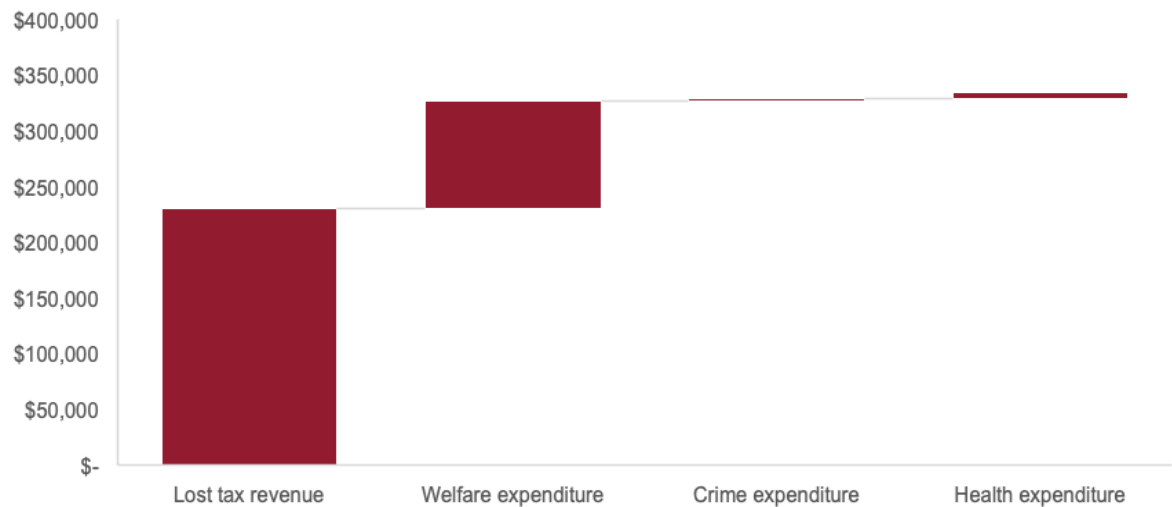
- Social costs: borne by individuals and society
- Fiscal costs: costs borne by government and taxpayers

Examples include:

Fiscal	Social
 Reduced tax payments	 Individual income losses
 Higher reliance on government health programs	 Social costs of poorer health
 Increased expenditure on criminal justice	 Loss from increased crime
 Higher reliance on welfare	 Excess burden of taxation
	 Reduced productivity spillovers

Each early school leaver costs government and taxpayers at least \$334,000 across their lifetimes – a total of \$12 billion for the 18% of students who leave school early.

This is a conservative estimate of the cost to taxpayers of not finishing school well, from lost tax revenue and increased welfare, crime and health spending.¹



ⓘ Limitations

We use the fiscal costs only in this modelling. This does not include the broader lifetime costs of developing individual capability and helping to build a socially inclusive society. Some additional costs include:

- Reduced productivity from having fewer skilled workers, which represents a significant loss of economic opportunity for the country
- The economic vulnerability for the young people themselves in that they are at greater risk of unemployment, cycles of low pay, and employment insecurity in the longer term
- Economic distortion imposed by raising taxes to pay for government social and health programs
- The social costs of entrenching the cycle of disadvantage, a less healthy community, and higher crime rates.

Source:
Lamb, S. and Huo, S. Counting the costs of lost opportunity in Australian education. Mitchell Institute report No. 02/2017. Mitchell Institute, Melbourne,
<https://www.vu.edu.au/sites/default/files/counting-the-costs-of-lost-opportunity-in-Aus-education-mitchell-institute.pdf>

Key assumptions – Delivery Costs

School Costs (based on 88 secondary schools in the 2021 school list)

1

Hands on Learning Program costs

Assumed program costs are between \$5,000 – 10,000 per school, based on advice from Save the Children and case study schools on average costs of delivery.

- Assumed schools with a café program component are \$10,000
- Assumed schools with just a build component are \$5,000
- Only counted secondary schools in calculations

Note: We acknowledge that each school's program looks different and costs vary between schools. However due to program costs being a small percentage of the overall delivery cost of Hands on Learning, we believe this range to be a representative estimate.

2

School staff wages

Wage calculations are based on the Hands on Learning FTE staff data for teaching and non-teaching staff at each secondary school

- Assumed a teaching staff annual salary of \$78,000
Source: average weekly wage from 2018 ABS data (using TableBuilder) for education professionals with a bachelors degree or higher
- Assumed a non-teaching staff annual salary of \$43,845
Source: average weekly wage from 2018 ABS data (using TableBuilder) for education professionals with "no degree", "Certificate" or "Diploma".
- We note that wages have increased for teachers (particularly in Victoria) in the last 3-4 years. However we chose 2018 ABS data as it is the most reflective source for actual weekly wages to avoid making additional assumptions about presumed seniority or experience of Hands on Learning teachers and artisan-teachers.

As an additional reference point, \$77,474 is the annual salary of a 2020 Victorian government school teacher who has around 3 years of experience (Range 1-3).

- Aggregated staff wage costs at each secondary school by using the average FTE for three school cases:
 - 1. Teaching staff only
 - 2. Non-teaching staff only
 - 3. Both teaching and non teaching staff

Then multiplying these cases by the number of schools in the 2021 school list.

3

Program fees

- Program fees are standardised based on the size and ICSEA rating of a school (see table below)
- Total cost of program fees to schools was calculated using the 2020 schools list (only including secondary schools), including school ICSEA data and school enrolment data.

Note: We understand this is an overestimation as not all schools currently pay school fees but given the model methodology, this difference is small and only affects the percentage schools contribute rather than the total delivery cost of the program.

- We chose this assumption to demonstrate potential program fees, showing the very low percentage that program fees contribute to the overall cost.

Fees for participation in Hands on Learning	Annual cost
Small and <1000 ICSEA	\$ 1,000
Large and <1000 ICSEA	\$ 1,500
Small and >1000 ICSEA	\$ 1,250
Large and >1000 ICSEA	\$ 1,750

SCA Hands on Learning Support Costs

4

Annual Hands on Learning School Support Costs

- We subtracted program fees from the Hands on Learning support costs to not double count this cost in the modelling (as it's a source of revenue for Save the Children)
- Given we are only accounting for the delivery cost of secondary students, we applied a secondary "factor" to total Hands on Learning Expenditure based on the percentage of secondary schools on the 2021 school list (73%).
- This factor was only applied to the scalable costs (as below)

Support Cost Category	Secondary factor
Total Staff Costs	0.73
Total Supplies, Transportation & Implementation	0.73
Total Office	1.0
Total Marketing, Financial Depreciation & Other	1.0
Total Administration and Internal Allocations	1.0