Providing evidence of the impact of ChildFund Australia's work in education by assessing student learning outcomes

ChildFund Australia's education program and how it has measured its results

ChildFund Australia has significantly expanded its work in education over the past decade. In part this was planned, as a priority sector in the CSP 2015-2020, in part opportunistic. An Education Adviser began work in Sydney in late 2015, the Board approved an Education Approach document in 2016 and Education Specialists were in place in five of the six Country Offices in Southeast Asia and the Pacific by the end of 2017. Under the Approach ChildFund's Education activities are defined as taking place mainly in formal, public education systems, at ECE, Primary and Lower Secondary levels. The focus is on working with government officials, teachers, children and parents/community members to build the all-round quality of individual schools based on a Child Friendly Schools framework. It is important to note that ChildFund also conducts many education activities outside state education systems and that these are supported by other teams of staff from sectors such as child protection, health and DRR-ER. Notable amongst these is ChildFund's regional program *Pass It Back* which uses a sports for development approach to present life-skills education to young people outside formal education settings.

Most donors are no longer satisfied with a simple presentation of results in the form of inputs and outputs or photos of groups of trainees or refurbished facilities. They are interested in whether our interventions have triggered any fundamental or long-term changes. This shift has coincided with success of MDG 2 (Universal Primary Education) in boosting participation rates in many places in which we work and moved attention from access to improved education quality. In 2018, ChildFund introduced a revised MELF which describes "outcomes" by sector in much more detail than its previous Development Effectiveness Framework (DEF). It can be argued that the four outcomes set out in ChildFund's education sector MELF (see below) ultimately contribute to one, overarching goal – the effectiveness of teaching and learning and that this is best expressed by evidence of children's learning achievements (in industry jargon - Student Learning Outcomes or SLOs).

ChildFund's Education Sector MELF - Outcomes

GOAL: Improved quality of basic education and improved learning outcomes for children

(ECE, Primary, Lower Secondary)

Outcome 1. Classroom practice:

Outcome 2. School governance and educational leadership

Outcome 3. Education systems

Outcome 4. Supportive families and communities and increased participation and access

SLOs, and their measurement, are a hotly contested topic these days whether in Australia (the NAPLAN controversy), globally (the rise of the international instruments such as PISA, TIMSS, PILNA etc. and debates over their credibility) and in the field of education and development (e.g. the World Bank's landmark Human Development Report for 2018, *Learning to Realise Education's Promise* – significantly subtitled "the crisis in

¹ ChildFund Australia's Strategic Plan (CSP) 2015-2020 chose education as one of three priority sectors for program work while expansion was also boosted by participation in NGO consortia implementing DFAT-grant funded projects in Laos and PNG. The CSP also encouraged Country Offices to increase the number of projects implemented with local civil society partners and influential partnerships in education have developed in Cambodia and Myanmar

² Cambodia, Laos, Myanmar, Vietnam and PNG all currently have education specialists, or are recruiting.

³ ChildFund and its local civil society partners work with state schools in all six countries. In Myanmar ChildFund has recently begun a long-term partnership with the national NGO MEDG (the Monastic Education Development Group) which provides technical support to many of the estimated 1 600 independent, monastic schools in Myanmar.

learning").⁴ Most of the arguments are about the mechanics and validity of data gathering, analysis and interpretation, as well as the uses and usefulness of the conclusions reached by the research. Amidst the chatter, however, there is general agreement that SLOs are a key indicator of the quality of education delivered by institutions or systems.

ChildFund Australia and the assessment of student learning outcomes

ChildFund CO's interest in measuring student learning outcomes at project level before 2015, when done at all, usually took the form of pre- and post-tests using home-made instruments. In 2011 ChildFund's Development Effectiveness Framework introduced an organizational level proxy Outcome Indicator (OI) for education quality. This was measured by conducting quick tests of reading performance with samples of children from each program area. The tests were devised by each country, following general guidelines and were usually based on language textbook content at the appropriate grade levels.⁵ Comparing results between one OI survey and the next gave an indication of progress. The results did show improvement over time but perhaps most informative was that the initial OI surveys revealed very low baseline levels of reading performance in nearly all countries. ChildFund's OI findings, rough and ready as they were, were consistent with the results of more formal EGRA testing by the World Bank and Ministries of Education in Cambodia, Laos and PNG.⁶ Local education officials initially challenged the test scores but retreated when parents confirmed that many of their children were struggling to acquire reading skills.

Since 2015 ChildFund Australia has focused more directly on assessing the learning of students in schools in program areas. An important catalyst was the partnership forged in Cambodia between ChildFund and Kampuchean Action for Primary Education (KAPE). The partnership turned a development paradigm on its head in that it saw the international NGO ChildFund Australia, with limited education expertise at the time, learning from KAPE, a local NGO which had pioneered the Child Friendly Schools approach over two decades of work in Cambodia. The first partnership project, Easy 2 Learn (E2L), financed by ChildFund, drew heavily on KAPE's experience and extensive repertoire of interventions in support of equity/access and quality improvement. One of KAPE's main targets was improving reading skills of children in the early grades of primary education. This involved the intensive assessment of children's progress through the (then) recently revised MoEYS language curriculum for Primary Grades 1-3.7 By August 2018 ChildFund was conducting seven E2L projects in three provinces in Cambodia and E2L ideas have significantly influenced ChildFund's education programming in Laos, Myanmar and Vietnam.

Other countries had also begun to put more time and thought into trying to measure children's learning. In May 2018 Education Specialists and Program Officers from all six countries met in Cambodia. Participants discussed a range of activities being conducted in education projects in their countries involving the assessment of student learning outcomes. These are summarised in the chart on the following page.

⁴ Program of International Student Assessment (PISA), Trends in International Maths and Science Study (TIMSS), Pacific Islands Literacy and Numeracy Assessment (PILNA) and, for the World Bank report, see http://www.worldbank.org/en/publication/wdr2018

⁵ The test items used in OI surveys drew on the content of government textbooks, adjusted for the age/grade of the sampled children, and focused on fluency and accuracy.

⁶ See, on Cambodia, USAID, <u>Data for Education Programming in Asia and Middle East Assessment of Early Grade Reading in the Education</u>
<u>Sector in Cambodia</u>, [RTI], Ed Data II Technical and Managerial Assistance, Task Number 15 Contract Number AID-OAA-BC-11-00001 July 2015 and on PNG see World Bank Group, Early Grade Reading Assessment (EGRA) Survey 2012 Diagnostic Results Reports for East New Britain, Madang, National Capital and Western Highlands.

⁷ The early grade literacy component of E2L was based on KAPE's TRAC program (Total Reading Assessment for Children) which was developed under a research grant awarded under USAID/AusAID/World Vision's All Children Reading Grand Challenge for Development in 2014. Under TRAC teachers conducted formative assessments of children's progress as readers with reference to the Ministry of Education Youth and Sports Khmer Language curriculum using standardised tests completed on tablets. Teachers then received feedback on children's test results which enabled them to respond to specific learning difficulties during the academic year, decreasing the likelihood of repetition or drop out if children failed end-of-year tests.

СО	SLO assessment activities	Comment
	Teachers in schools participating in Easy 2 Learn (E2L) in	Tests are standard, completed by children on
Cambodia	Svay Rieng and Kratie conduct formative, interval testing	tablets with data downloaded and analysed
	on benchmarks set out in MoEYS curriculum. Intervals	at a central location with feedback given to
	between tests vary according to Grade (1, 2 or 3) by are	teachers on students' performances enabling
	generally administered 4-6 weeks apart following KAPE's	individualised responses.
	model. EGRA testing has also been carried out in 8	In Battambang, EGRA data will assist assess-
	schools in Battambang to collect baseline data on	ing the effectiveness of the project on
	students' reading performance.	students' progress in reading.
	Pre- and post-testing to measure improvements in Lao	Initial interest in funding an expanded trial of
Laos	literacy of ethnic minority children in rural primary	the BEIF pilot evaporated following the axing
	schools in a literacy and life skills pilot project run with a	of the NGO consortium component of the
	BEQUAL Education Innovation Fund (BEIF) grant and	BEQUAL project. Funding for a second trial
	followed up by IPEG (UK Embassy-funded).	was then secured from the UK Embassy.
	Laos' newly designed and approved education project	Laos may benefit from experiences in E2L
	(SABEL) proposes to use EGRA-type testing as a baseline	Cambodia and with EGRA in T4Ed in PNG to
	from which to measure children's learning outcomes in	plan and implement SLO assessment in SABEL
	literacy.	and IPEG (if it receives further funding).
	The <i>Our School</i> partnership project with MEDG is	EGRA tests are planned to take place in 2019.
Myanmar	considering using an EGRA-type test to provide data on	CFMM and MEDG staff re-visited Cambodia in
	children's reading skills over course of the project and	December 2018 to see how E2L incorporates
	incorporating E2L interval testing in one or more of the	formative assessment and response to
	six demonstration schools supported by the MEDG	learning difficulties.
	partnership project.	
	The Together for Education DFAT grant-funded project	EGRA test results are included in the Baseline
Papua	used an EGRA-type test (Save the Children's "Literacy	and Midline Report [in draft] reports on the
New	Boost" model) as part of its baseline data collection in	T4Ed project.
Guinea	late 2017 in 13 treatment and 13 control schools,	EGRA test data may also help assess the
	followed up with a Midline test in the same schools at	effectiveness of the LFA Digital Library
	the end of 2018 and plans a final test in a sample of the	intervention in 2 schools in 2018.
	25 schools supported in 2019.	
_	Partnership projects with local NGOs Alola Foundation	ChildFund Timor Leste staff agree they need
Timor	and Mary McKillop Today use home-made pre- and	to strengthen their assessment practice and
Leste	post-tests to measure children's development as	to learn from other COs.
	readers over the course of the project.	
	Testing of SLO's in Vietnam's education project is	Education projects in Vietnam have
Vietnam	carried out by teachers as one of their professional	historically been carried out with and through
	duties. The integrity of school testing varies widely but	government partners in ECE and primary
	typically relies heavily on memorization and	schools. There has also been a strong focus on
	regurgitation. Student assessment data has generally	construction.
	not been used as evidence to show the effectiveness of	Smaller, pilot projects with MOET, now under
	ChildFund's education interventions in Vietnam.	consideration, offer possibilities for
		introducing more SLO-specific assessment.

Since the meeting in May 2018 the momentum has been maintained with at least three, and possibly four, countries on track to produce SLO data using EGRA or EGRA-type assessments by the end of 2019 – Cambodia, Laos and Papua New Guinea and possibly Myanmar. All six ChildFund Australia-managed countries can also be expected to have improved the way they design and conduct pre- and post-testing and in analysing and presenting the data collected. The best two examples of evidence of improvements in student learning available to date are from Cambodia and Papua New Guinea.⁸

⁸ Graphs and commentary about Cambodia and PNG projects sourced from a report to the ChildFund Australia Board, March 2019, on MELF.

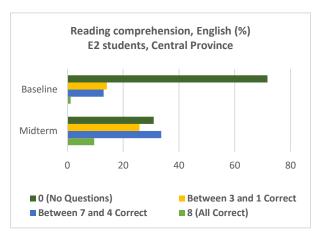


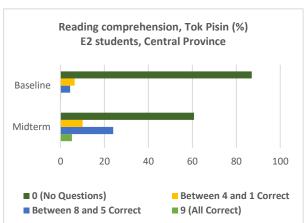
Cambodia: Easy to Learn (E2L) and New Generation School (NGS) projects

- Contributing to the learning outcomes was the training and use of effective teaching and learning approaches, reading benchmarks, formative assessments and/or interval tests, and the implementation of the Total Approach to Reading (tablets and reading toolkits)
- Teaching and learning shows progress although Early Grade Reading Assessment (EGRA) results should improve.
- Levels of reading appear to be reasonable in comparison with state schools and mean scores for reading fluency are according to MoEYS expectations of 'every child who successfully complete Grade 3 will be able to read with understanding at a level of 45-60 words per minute'9.
- A mean reading fluency score of 63wpm (SD=43) was observed at Grade 3 in 2018, although the high standard deviations and other figures relating to non-readers show that significant minority of children are not reaching acceptable standards of reading in the early grades.

Papua New Guinea: Together For Education (T4Ed) project

The project aims to enhance access to quality Elementary education for girls and boys in Central, Madang and Morobe Provinces, with a focus on literacy and numeracy skills. The graphs below compare the results of baseline and midline on reading comprehension in English and Tok Pisin for Elementary 2 students in Central Province (where ChildFund is the implementing agency).





⁹ Evaluation Report, New Generation School Project KH01-044 (June 2018)

What we have learned

How ChildFund Australia assesses SLOs

To summarise, the ways ChildFund Australia currently assesses children's learning outcomes in its education projects, thus providing evidence of impact, are:

- 1. Using a standardised tool and conducting it in a reasonably rigorous way (actually doing so PNG and Cambodia, intending to do so Laos, Myanmar).
- 2. Using our own methods, usually some form of home-made pre- and post-test (East Timor, Laos).
- 3. Asking end of project evaluators/evaluations to do it (most CO's do this and most evaluators use FGD's or interviews to obtain data, mostly qualitative, relying heavily on informants' perceptions and self-assessments).
- 4. Using participant perceptions or Outputs as a proxy for quality and, maybe, compiling case studies or some other kind of anecdotal record to support the self-assessments (Vietnam and most countries at various times, especially for small projects).

What ChildFund has learned about assessing SLOs

- It is difficult, time consuming and can be expensive to conduct EGRA-type testing . . . but it is probably necessary (or, at least, very helpful) in convincing hard-nosed donors that our projects result in change/improvement (i.e. have an impact). Showing children's learning gains by children is also a strong indicator of sustainable impact as literacy/numeracy is a necessary foundation for later learning, improved "quality of life" (including participation in the economy) and active citizenship.
- There are different levels of sophistication in assessing SLOs. ChildFund cannot conduct RCTs (Random Control Trials, the so-called "gold standard") because they are simply too expensive. We thus use "quasi-experimental" models which are considered quite respectable in M&E circles.
- EGRA-type tests are the industry standard but internally developed processes can also be rigorous and informative e.g. E2L.
- At a simpler level smaller projects/smaller budgets pre- and post-testing that is "good enough" is useful and informative BUT it must be done carefully, systematically and have been well-documented. The BEIF project in Laos failed in this regard (and IPEG may also not deliver as we hoped) and East Timor staff also feel as though they need to improve their practice in this area.

What ChildFund has learned <u>from</u> assessing SLOs (and consequent changes in practice)

- That SLO's in literacy and numeracy, but especially literacy, are weak across all the countries we work in, confirming the weight of evidence summarised in the World Bank global report of 2018.¹⁰
- That ChildFund's prior practice in this area was weak and unsophisticated, relying heavily on anecdotal evidence, proxy indicators (inputs and outputs) or questionable snap assessments. CO's attempts to design pre- and post-testing were often inadequate. E2L in Cambodia is our only example of a credible, home-grown, alternative means of assessment.
- Introducing standard EGRA testing, or EGRA-type testing, is the main way we are now trying to collect evidence on student learning outcomes in literacy and numeracy. To design and conduct credible EGRA or

The exception <u>may</u> be Vietnam, where we have not done any testing, although strong anecdotal evidence suggests that comprehension is as big a problem there in early grade literacy as it is in other countries. It would be interesting to conduct EGRA-type testing in Vietnam, particularly with ethnic minority students, to check this assumption and perhaps to qualify other, very positive, recent assessments of the results achieved by state school students in Vietnam in TIMSS and PISA assessments. These results are viewed with skepticism, and even scorn, by some Vietnamese education commentators when speaking off-the-record.

- EGRA-type assessments still requires participation by consultants (e.g. PNG, Battambang, Laos) as our CO staff do not yet have the skills required.
- It will be worth making the investment in EGRA-type tests in Myanmar (MEDG) and Laos (SABEL), where projects are long-term and relatively well-funded (both by CF Korea) to provide quality impact-level data and to meet our own MELF standards.
- That the introduction of tablets and Kobo software has greatly simplified the collection and analysis of data from EGRA-type testing (PNG experience) and has enabled our CO staff to be actively involved in the process of assessing student learning outcomes.
- COs not yet ready to include EGRA or EGRA-like standardised testing are all now aware of the need for strengthening their current practice around pre- and post-testing. This entails using existing and tested assessment tools and thinking through the story which they want project M&E to help them tell what outcomes are expected? what evidence will be needed to claim them?

What ChildFund has learned about assessing SLOs and about research into SLOs in general

- Global instruments which seek to assess student learning outcomes in various education systems may offer
 insights at a system level but are of little or no help to teachers who want to assess the learning outcomes of
 a particular group of students in their class (or NGOs who want to assess the impact of a small-scale
 intervention).
- Regular and ongoing assessment by teachers in their classrooms to gauge the progress of individual children
 as learners, respond to their needs and develop their talents is an area in which NGOs and individual
 researchers can take a lead role as most of the big aid and/or research organizations are unable or unwilling
 to operate at this level.
- The results of just about <u>any</u> piece of research in education, irrespective of size and the level of investment, can be contested. Contestation will usually be couched in methodological terms but the motivation for it is often commercial, political or ideological. The same piece of research may even be used to justify opposite points of view.¹¹
- Scale, expense and "rigour" do not necessarily bring certainty and it is very difficult to control for all variables. Big research may come with big mistakes or be so heavily qualified as to invite questions about why it was ever undertaken in the first place. NGOs should resist being intimidated by highly-credentialed institutions/organizations who attempt to dismiss their findings on the grounds that they are anecdotal, lack scale, sophistication or rigour although, of course, sometimes this will be true! Large research organizations are always very wary of arguing with NGO staff who have first-hand knowledge of what is happening on the ground. It is surprising how much gold-standard research confirms things that many NGOs already knew and had been on the record as saying.

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¹¹ See, for example, <u>The Australian</u>, February 9-10, 2019 which ran "Doubts over reading program data" (p. 5) on a "landmark study into the long-term effectiveness of the popular Reading Recovery literacy program . . ." conducted by KPMG. Supporters claimed the study demonstrated the effectiveness of the program which critics argued that the final report on the study omitted reference to a data set which suggested that the program made little difference. The article concluded by quoting a Principal from the Illawarra region of NSW who said that his school "relies on Reading Recovery to help up to 20 per cent of students and has found it has substantially improved their reading and writing . . . [The principal] was aware of a multitude of research but was guided by the data collected from students at his school".