



EVALUATION OF KOKODA TRACK FOUNDATION'S EARLY YEARS PROGRAM

EQUITY ECONOMICS AND DEVELOPMENT PARTNERS | MARCH 2022



EQUITY ECONOMICS



About this report

ABOUT EQUITY ECONOMICS

Equity Economics is a leading consulting firm, providing analysis, policy development, design and evaluation services to government, private sector and non-government clients.

We specialise in economic and social policy, and international development. We combine technical economic skills with policy and design expertise, helping our clients contribute to a more inclusive, equitable society. Our work addresses the persistent challenge of social and economic disadvantage, through new and practical solutions. We work in collaboration with our clients, and are believers in life-long learning. We are committed, and in for the long haul.



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ABOUT KOKODA TRACK FOUNDATION

KTF works with people and communities to improve lives, livelihoods and futures.

It does this by assisting remote and rural communities with access to elementary and primary education; improving access to quality and accessible healthcare; improving opportunities for and the safety of women; and by fostering the next generation of leaders. KTF believes in a holistic and rights-based approach to development. By working across the important areas of education, health, livelihoods and leadership in partnership with local people, local organisations and PNG institutions, KTF can co-create the change that is urgently needed in PNG.



TEACH FOR TOMORROW, EARLY YEARS

Teach for Tomorrow, Early Years is supported by the Australian Government through the Australian NGO Cooperation Program (ANCP), Newcrest Mining and the PNG Sustainable Development Program Ltd.



Disclaimer

This publication has been funded by the Australian Government through the Department of Foreign Affairs and Trade. The views expressed in this publication are the author's alone and are not necessarily the views of the Australian Government.

ACKNOWLEDGMENT OF COUNTRY

We acknowledge Aboriginal and Torres Strait Islander peoples as the Traditional Owners of Country throughout Australia and their continuing connection to both their land and seas. We also pay our respects to Elders – past and present – and generations of Aboriginal and Torres Strait Islander peoples now and into the future.

CITE THIS REPORT AS

Equity Economics (2022),
Evaluation of the Kokoda
Track Foundation Early
Years Program, March 2022

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Executive Summary

The purpose of this evaluation is to examine the impact and effectiveness of Kokoda Track Foundation's (KTF) Early Years program on improving Early Childhood Education (ECE) knowledge and skills among trainers, teachers, and other partners in Papua New Guinea (PNG).

KTF's Early Years program seeks to develop readiness and preparedness for formal schooling for early childhood aged children. The program works alongside Provincial Departments of Education to develop an ECE program framework and teacher upskilling program.

The evaluation drew on the Organisation for Economic Development's (OECD) evaluation guidance on using and applying six evaluation criteria – provided in the table below. The review finds, based on this criteria, Early Years scores 23 out of a possible 30 points (77%).

Criteria	Score (Out of 5)
Relevance	3
Effectiveness	4
Efficiency	4
Impact	3
Coherence	5
Sustainability	4
Total	23/30 (77%)

The review finds that KTF's Early Years program is a relevant and effective vehicle to promote ECE in PNG. Given the scale of the school reform in PNG and the need for significant investment and training to achieve the ECE goals of the PNG government, the program is timely and addresses a significant need in PNG.

The workshops have a distinct impact on trainers, teachers and community members who attend, demonstrating the importance of ECE in terms of social, emotional and cognitive development while promoting sustainable, localised ways to encourage healthy play and learning.

KTF has successfully supported the commencement of two ECE programs in PNG and the installation of equipment and delivery of teacher training across 9 schools in 7 Provinces. Importantly, the Early Years program has catalysed discussion on ECE among several additional schools and supported provincial governments to gradually progress its implementation.

Further roll out of ECE programs is stymied however by the slower than expected implementation of National Government ECE policy, which is subject to the 3-6-6 national education system restructure. The implications of the slow rollout of the restructure are that trainers and teachers are struggling to see the immediate relevance of the ECE training, and elementary schools don't currently have the space, qualified teachers or funding to support it. While Early Years is perceived by teachers as important and exciting, it is difficult for some to envisage how they can implement the program in practice. As a result, the program, while having a significant impact on trainers and teachers, has had limited impact on children and communities at this stage of its implementation.

Support also needs to be provided for communities, particularly those in rural and remote parts of PNG, to understand the purpose of ECE and the positive outcomes for their children. All teachers interviewed for this review commented that parents needed convincing that their children would benefit from an Early Years program. There is a risk that without adequate awareness raising at the parent and community level on the benefits of ECE, attendance will be low.

Given this context the review finds two potential areas of focus for KTF's program going forward.



FOCUS AREA 1

Go wide: KTF's Early Years program broadens its reach.

- KTF should broaden the reach of its education program to a wider audience that includes community leaders and parents. KTF's increased emphasis on awareness raising on ECE will help mitigate the high risk of low attendance at ECE programs, once the school restructure is rolled out and ECE is mandated PNG-wide. It also speaks to KTF's overarching objective to support the most disadvantaged communities in remote and rural PNG.
 - » A key aspect of this heightened communication approach also requires KTF to explicitly communicate that ECE is a national government policy that will soon be implemented nation-wide. This mitigates the possible perception that ECE is a donor-led initiative. It also helps clarify for teachers, schools, and communities the timeframe for implementation and the purpose of the training and information that is being provided.
- KTF should also work to elevate the voices of provincial trainers, teachers and schools, particularly those in rural and remote areas, to raise with the National Department of Education their concerns on the impact of the 3-6-6 restructure on limited education resources.



FOCUS AREA 2

Go deep: KTF's Early Years program deepens its investment in pilot programs.

- This may require KTF to support fewer but more comprehensive, demonstration programs from which other schools, community leaders, and provincial authorities, can visit and learn from. For this to occur:
 - » KTF should become more involved in the selection of the ECE pilot program locations.
 - » KTF should check-in with schools at quarterly intervals to provide support and improve monitoring and learning.
 - » KTF should build on its ECE foundations by using the pilots to demonstrate effective ECE to a broader audience while ensuring that lessons are learned through annual surveys and program evaluations.

Context & Background

KOKODA TRACK FOUNDATION

Working in PNG communities for over a decade, KTF has delivered a range of projects along and around the Kokoda Track and elsewhere in PNG. These programs have promoted better health, education, livelihoods, and leadership opportunities for PNG communities in 17 of PNG's 22 Provinces.

Education is a significant aspect of KTF's broader program. Under the education pillar, KTF seeks to support high functioning and resourced, locally relevant, empowered education systems in PNG to promote school attendance, particularly in rural areas. KTF's overarching education program outcomes include:

- Increased number of teachers in remote and rural areas who are supported, skilled, confident and committed.
- Increased readiness and preparedness for lower primary school enrolment amongst 5 – 6 year olds in remote and rural areas.
- Increased number of children attending and completing elementary and/or lower primary schooling.
- Increased number of schools remaining open all year round and are supported by parents, community and government.
- Annual cycle of professional development activities for trainers and teachers supported by community and government.

EDUCATION IN PNG

School attendance and literacy rates in PNG are some of the lowest in the world. The average number of years of schooling achieved by adults in PNG is four - the lowest level in the Pacific Islands region – and is comparable to the levels of schooling attained by adults in sub-Saharan Africa. The current completion rate of primary school in PNG is 59 per cent. The 2018 Pacific Islands Literacy and Numeracy Assessment results show PNG Grade 3 students are



Why support the early years?

The importance of quality early childhood education is reflected in the United Nations Sustainable Development Goals. Target 4.2 specifically calls for access to quality pre-primary education for all children.

According to UNICEF's 2019 report, *A World Ready to Learn*, early childhood education provides the highest return on investment of all education sub-sectors. UNICEF recommends governments adopt policies that commit to universal pre-primary education and prioritize the poorest and hardest-to-reach children at the start of the road to universality, not the end. Children enrolled in at least one year of pre-primary education are more likely to develop the critical skills they need to succeed in school and less likely to repeat grades or drop out. As adults, they contribute to peaceful societies and prosperous economies. The report recommends governments progressively grow the pre-primary system, while improving the quality of teachers, resources, and curricula.

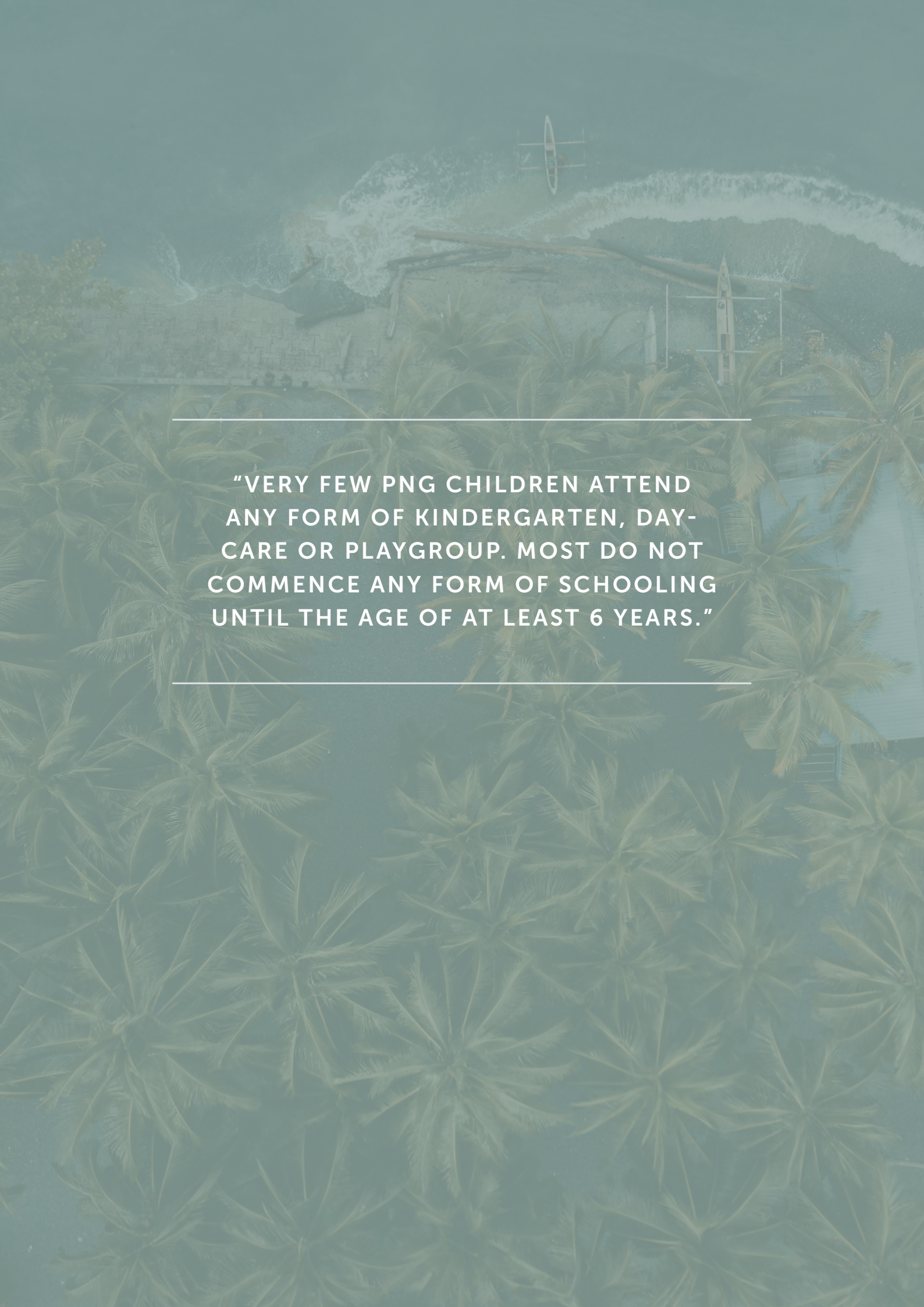
performing considerably lower than the Pacific region in literacy, with over 40% of Grade 3 and 5 students performing below minimum expected proficiency levels. School enrolment rates were stagnating even prior to the COVID-19 pandemic. In 2019, four of every ten children enrolled in the Elementary 2/Grade 2 level (aged approximately 8) failed to continue to Grade 3.

Very few PNG children attend any form of kindergarten, day-care or playgroup. Most do not commence any form of schooling until the age of at least 6 years. Some churches or private firms operate early learning programs but these are very few. In 2020 UNICEF helped to establish 73 ECE centres across PNG with over 7000 children enrolled.

In the last four decades, the PNG education system has undergone many reforms. In 2020, the PNG National Department of Education (NDOE) formally changed the structure of its education system and began its transition to "3-6-6 schooling". This means that children will receive 2 years of ECE in addition to 1 year of preparatory elementary schooling, followed by 3 years of junior primary and 3 years of senior primary, and a further six years of secondary schooling – as shown in Table 1. Under the previous National Education Policy (NEP) structure (2015-2019) children aged 0-5 were to be at home, in play groups or at day care. Under the new NEP structure (2020-2029) children aged 0-3 are still to be at home or in play groups, however children aged 4-5 are to be participating in ECE.

Previous NEP (2015-2019) 3-6-4 structure		Age	New NEP (2020-2029) 3-6-6 structure	
Classification	Grade		Classification	Grade
Children at home, play groups or day care Regulated by the National Office of Child and Family Services under the <i>Lukautim Pikinini</i> Act.		0-3	Children at home, play groups or day care. Regulated by the National Office of Child and Family Services under the <i>Lukautim Pikinini</i> Act.	
		4	Early Childhood Education	
		5	Early Childhood Education	
Elementary	Preparatory	6	Preparatory	Pre-school
	Grade E1	7	Junior Primary	Grade 1
	Grade E2	8		Grade 2
Lower Primary	Grade P3	9		Grade 3
	Grade P4	10	Senior Primary	Grade 4
	Grade P5	11		Grade 5
Upper Primary	Grade P6	12		Grade 6
	Grade P7	13	Junior Primary	Grade 7
	Grade P8	14		Grade 8
Lower Secondary	Grade 9	15		Grade 9
	Grade 10	16	Senior Secondary	Grade 10
Upper Secondary	Grade 11	17		Grade 11
	Grade 12	18		Grade 12

Table 1: National Education System Restructure 3-6-6
Source: Adapted from DFAT 2022, *Wok Wantaim Long Strongem Edukeisen, PNG Partnerships for Improving Education*.

An aerial photograph of a tropical beach, heavily overlaid with a semi-transparent teal filter. The image shows a dense field of palm trees in the foreground and middle ground. In the background, a sandy beach leads to the ocean. A wooden pier or structure extends into the water, and a small boat is visible on the waves. The overall scene is serene and natural.

“VERY FEW PNG CHILDREN ATTEND ANY FORM OF KINDERGARTEN, DAY-CARE OR PLAYGROUP. MOST DO NOT COMMENCE ANY FORM OF SCHOOLING UNTIL THE AGE OF AT LEAST 6 YEARS.”

IMPACT OF EDUCATION RESTRUCTURE

The impact of these changes for the education system in PNG will be significant with many implications:

1. As elementary schools are phased out and replaced with primary schools for children aged 6-14, few of the elementary teachers will have the requisite qualifications to teach in primary schools. Many will need to upgrade their qualifications but there are limited opportunities for them, particularly in remote and rural areas. KTF's Teach4Tomorrow program has worked to support the upgrading of teacher qualifications through its support to Flexible Open Distance Education Colleges (FODE) around PNG.
2. The elimination of elementary schools will result in over-crowding of primary schools and an increased distance for many children to travel to attend school. This will potentially result in lower enrolment and decreased transition rates in primary school. A related issue is the fiscal capacity of the government to pay teacher salaries even if additional qualified teachers are appointed to teach in primary schools.
3. It will also result in the redundancy of elementary school buildings. Elementary schools could be repurposed for the provision of ECE and preparatory education.
4. Very few teachers are qualified to teach ECE as PNG universities and colleges have only recently begun offering ECE courses. ECE is a new concept and the differences between primary and secondary education and ECE are not well understood.

Once the new NEP is mandated, teachers and schools will be given little time to prepare for and implement these changes. Recent reforms to teaching qualifications for secondary school, for example, meant many teachers were suddenly taken off the payroll with minimal notice or opportunity to prepare.

Program Overview

KTF'S EARLY YEARS PROGRAM

KTF's Early Years program is an education and training program that seeks to develop readiness and preparedness for formal schooling for early childhood aged children. The program works alongside provincial departments of education to develop an ECE program framework and teacher upskilling program. It is designed to enable elementary teachers to transition their skill set to deliver specialist, child-centred, age-appropriate learning to children aged 3 to 5 years.

The Early Years training focuses on topics including pedagogy, assessment, child-behaviour, inclusive education, child protection and using natural materials to educate others. The training courses cover content such as the importance of early years education, how young children benefit from play and how ECE is different to elementary schooling. There is an emphasis on incorporating natural materials such as eggshells or plants into play and learning. Training is conducted through presentation, role playing, and hands on activities.

KTF funds the workshops and production of curriculum material such as hard and soft copy ECE manuals, as well as pedagogical information on ECE and child learning. Provincial education teacher trainers assist KTF to identify schools and communities in their province that may be most suitable or amenable to the Early Years program, based on their location and ease of transport and teacher interest. Teachers are given tablets with ECE content such as podcasts, videos and relevant curriculum material, and teaching ideas.

KTF funds and arranges for transport and construction of physical infrastructure for the establishment of early years play spaces in identified schools. These play spaces include equipment such as swing sets, sandpits, child-sized desks and drawers, as well as some equipment such as paints and crayons. Communities are expected to volunteer their time to support KTF builders with the construction of the play space as well as logistics in setting up the early years space.

The steps involved in implementation of the KTF Early Years program are shown in the Figure 1 below.

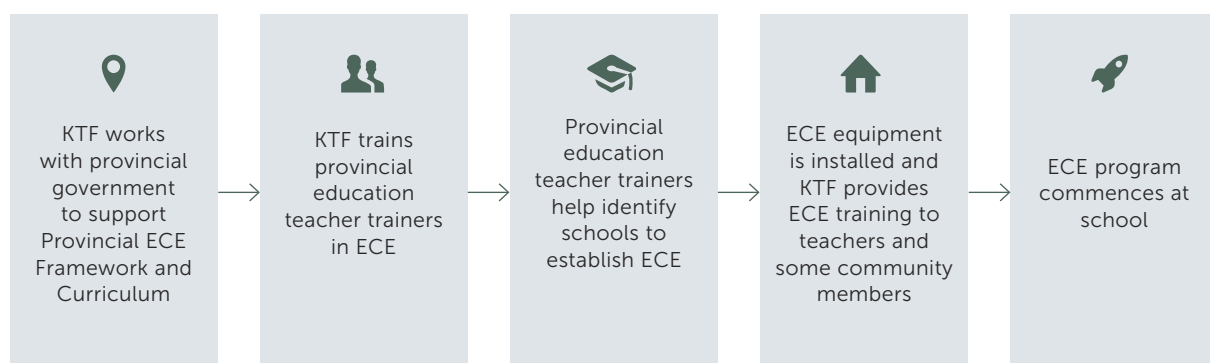


Fig 1. Flowchart showing the steps involved in KTF Early Years program implementation

PROGRAM OBJECTIVES

Table 2 provides an overview of the goals, indicators and outcomes of KTF's education programs. Outcomes 1, 2, and 8 are most relevant to the Early Years program specifically.

<p>PROJECT GOAL:</p> <p>That all Papua New Guinean children have an opportunity to enrol in an Early Childhood Education program, delivered by trained and supported ECE teachers, to improve school readiness for entry into the formal education system.</p>	
<p>INDICATORS:</p> <ul style="list-style-type: none"> » % of children enrolled in ECE programs in remote and rural PNG disaggregated by grade, gender and disability » % of children receiving high quality ECE teaching and learning in remote and rural PNG disaggregated by grade, gender and disability » % of children with improved school readiness » % of children enrolled in formal schooling who came from ECE programs disaggregated by grade, gender and disability 	
<p>Outcome 1: Increased number of provincial teacher trainers with improved ECE and junior primary skills, knowledge, networks and confidence</p>	<p>Indicators: Number of confident, competent provincial trainers delivering ECE professional development program to elementary teachers in line with provincial government priorities and best practice teaching and learning</p>
<p>Outcome 2: Increased number of elementary teachers with short-course teaching qualifications to teach at the ECE level.</p>	<p>Indicators: Number of elementary teachers participating in ECE short-course teaching programs delivered by provincial elementary teacher trainers</p>
<p>Outcome 3: Increased number of elementary teachers with skills and confidence to teach at the junior primary level.</p>	<p>Indicators: Number of elementary teachers participating in junior primary short-course teaching programs delivered by provincial elementary teacher trainers.</p>
<p>Outcome 4: Increased number of primary teachers with skills and confidence to teach at the junior primary level</p>	<p>Indicators: Number of primary teachers participating in junior primary short-course teaching programs delivered by provincial elementary teacher trainers</p>
<p>Outcome 5: Increased number of teachers participating in bi-annual professional development and learning opportunities to improve their skills, knowledge and confidence in teaching in the classroom</p>	<p>Indicators: Number of elementary and primary teachers participating in regular professional development and learning opportunities</p>
<p>Outcome 6: Quality teaching and learning being delivered by certified junior primary teachers across remote and rural PNG</p>	<p>Indicators: Number of classrooms with a) full-time, confident teachers on payroll with b) features logged or on display that identify indicators for student growth for all pupils, and c) engaged pupils on task with a variety of SBC curriculum activities.</p>
<p>Outcome 7: Increased retention of teachers within the teaching profession and in remote and rural schools</p>	<p>Indicators: Number of teachers who are committed to remaining in the teaching profession for 5-10+ years</p>
<p>Outcome 8: Increased population of 4–6-year-olds accessing early childhood education in remote and rural areas</p>	<p>Indicators: Enrolment and attendance rates of 4–6-year-olds accessing newly established ECE programs across remote and rural PNG</p>

Table 2. KTF Education Program Theory of Change.
Source: KTF Teach for Tomorrow Early Years Project Design

PROGRAM LOCATION

Early Years currently supports ECE either through equipment and/or training in 7 Provinces: Central, Morobe, Gulf, Oro, Milne Bay, New Ireland and Western. KTF plans to implement the program in Southern Highlands, Hela, Enga, and Autonomous Region of Bougainville in 2022.

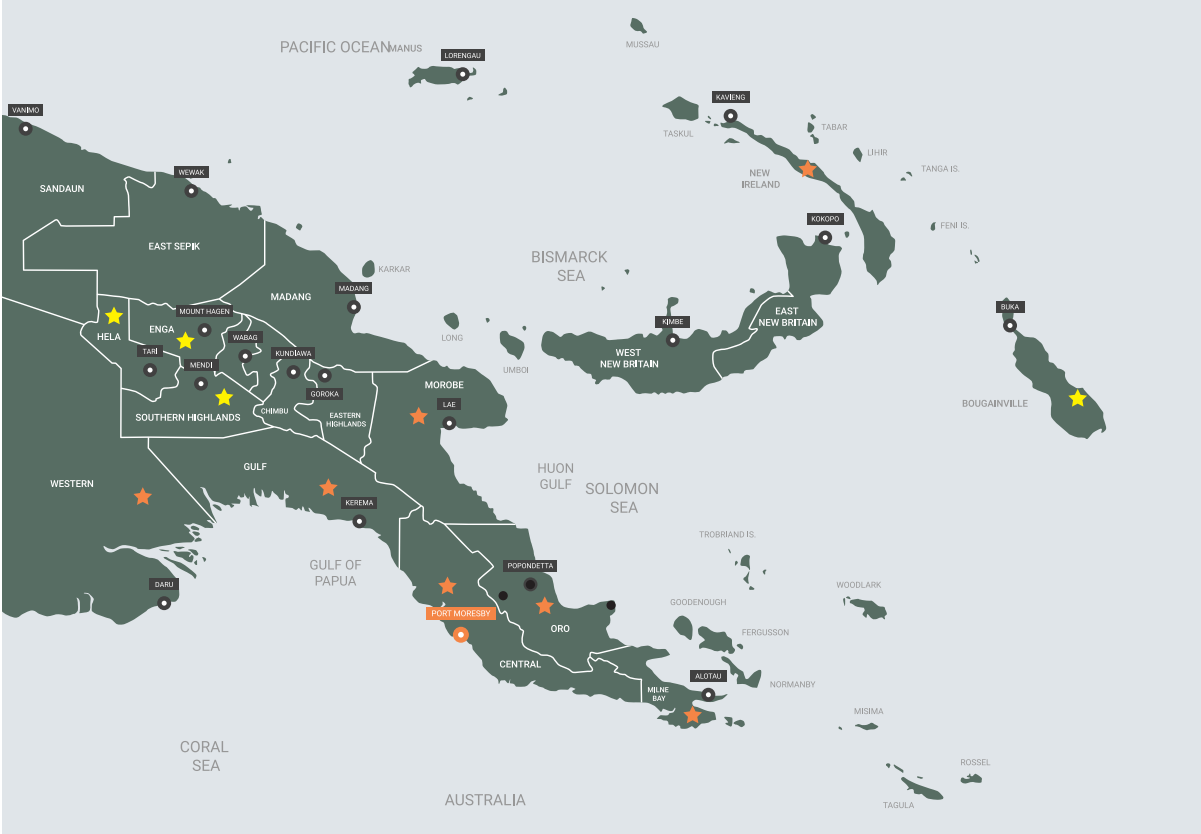


Fig.2. Map of Early Years program location. Orange stars denote current program locations and yellow stars denote planned program locations for 2022.

The Methodology is provided in Appendix A.

Findings

KTF's Early Years program scored 23 out of a possible 30, or 77% overall on the basis of relevance, effectiveness, efficiency, impact, coherence and sustainability. These results are discussed in detail below.

Criteria	Score (Out of 5)
Relevance	3
Effectiveness	4
Efficiency	4
Impact	3
Coherence	5
Sustainability	4
Total	23/30 (77%)

Table 3: scoring of criteria

Relevance

Are the project's aims and objectives still relevant and important, and are the project activities consistent with the aim of the project?

The project's overarching goal – that all PNG children have an opportunity to enrol in ECE programs - remains important. Currently, very few children in PNG have the opportunity to attend any kind of education setting between the ages of 0-6. There is also increasing evidence that attendance at early years facilities helps increase school readiness and promotes learning and brain development.

The program's objective is also relevant to NEP reforms in PNG. Very few provincial governments are adequately prepared to implement the new education system restructure. Provincial education authorities lack an understanding of how to introduce ECE to the current school system. Elementary teachers do not have a background in ECE and when the restructure occurs, KTF's ECE curriculum, and education of trainers and teachers will play an important role in supporting provincial governments and schools to make the transition.

The training provided by KTF was in all cases regarded as appropriate and well targeted.

Participants in this review said the training was enriching and informative. They had not been introduced to play-based learning before, and these were new and important ideas to them.

The training KTF organised was excellent, participants found the ideas were extremely helpful. The ideas that were disseminated were very good, and participants also enjoyed making up their own ideas.

- TRAINER

Trainers said that the training was practical with plenty of hands-on elements and good ideas that were appropriate to their context. They said they really enjoyed the role playing and they enjoyed learning about how natural materials, such as eggshells or leaves, can be incorporated into learning and play.

Children were impressed to look at things like egg cartons and lolly water containers. Teachers changed them into something that was very useful in the classroom. That was very creative by the teachers.

– TRAINER



Image 2: Basic materials for early years play

An obstacle to greater program relevance is the national government's gradual and stop-start approach to implementation of the ECE policy. Despite announcing in 2020 that preschool education would be incorporated into the education system, little further policy directive or planning appears to have taken place. Provincial governments have been tasked with the implementation of the policy but have not been supported to do so through other scaffolding policies such as early childhood education courses, curriculum or frameworks. Any initial efforts have also been hampered by COVID-19.

The review found that teachers did not fully appreciate the link between the ECE training and the forthcoming education system restructure, and therefore were unclear on where they could hold the ECE program and wanted support to construct new buildings. As a result, schools and communities did not fully perceive the KTF's ECE training to be immediately relevant to their needs.

Relevance could be increased by more clearly explaining through the Early Years training program, the link between the ECE training and the school reforms so as to clarify the timeframe for implementation and allay concerns about finding buildings to house the program.

Teachers also cited a lack of community awareness on the importance of early learning. Even the teachers that had successfully commenced their ECE program noted that significant community awareness was required to get parents interested in the program. In order to increase the relevance of the ECE training to the communities and parents, KTF could broaden its education on ECE to a wider audience.

3/5

This criterion is scored 3/5 due to the slow rollout of the national education restructure, meaning schools and communities do not see the immediate relevance of Early Years. To promote greater relevance, KTF could communicate more clearly the implications of the restructure and the implications for the teaching of younger children, and elementary schooling.

Effectiveness

Is the project achieving its intended objectives; what has happened as a result of the project?

This section considers the program’s effectiveness against its overarching goal and 8 outcome measures, with a particular focus on the most relevant outcomes 1, 2 and 8. Outcomes 3-7 are more focused on Teach 4 Tomorrow priorities and are less relevant to the analysis.

OUTCOMES 1 AND 2

KTF is effectively educating trainers and teachers and those participants are valuing the learning provided by KTF. In 2021, 85 district elementary trainers/senior educators and 37 teachers across PNG were trained in ECE, as shown in Figure 3, down from 112 and 0 respectively in 2019 and up from 83 and 39 in 2020, largely due to COVID-19 travel restrictions.

Trainers and teachers were educated through week-long workshops. More workshops were delivered in 2019 than 2020 and 2021 again due to COVID-19 travel restrictions.

Surveys from Gulf Province provided insight into the usefulness of the workshops. As shown in Figure 4, the most helpful aspect of ECE training was the manual which participants received. Figure 5 shows that the most important factor empowering teachers to teach ECE was the activities and resources provided in the workshop. Participants said that in terms of what KTF could do better, they would prefer more training, as shown in Figure 6.

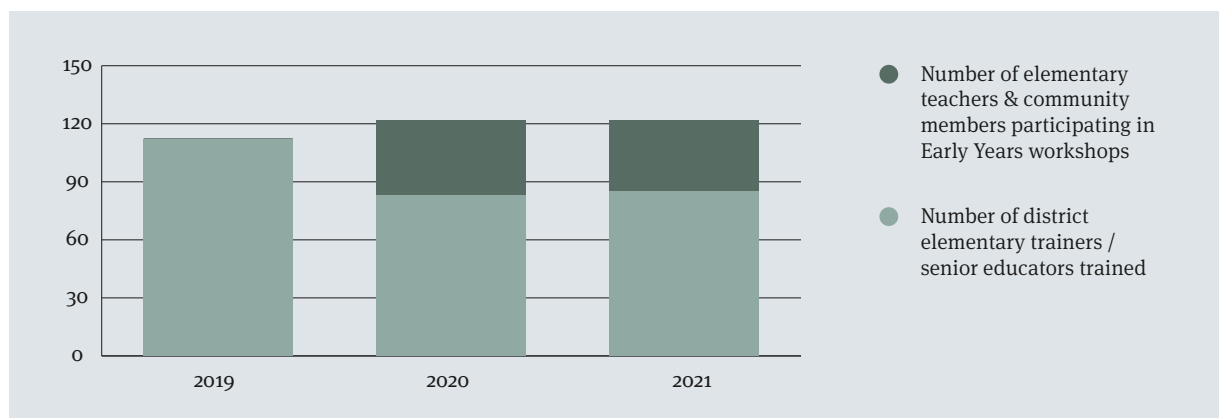


Fig 3. Number of trainers and senior educators and teachers trained in Early Years education

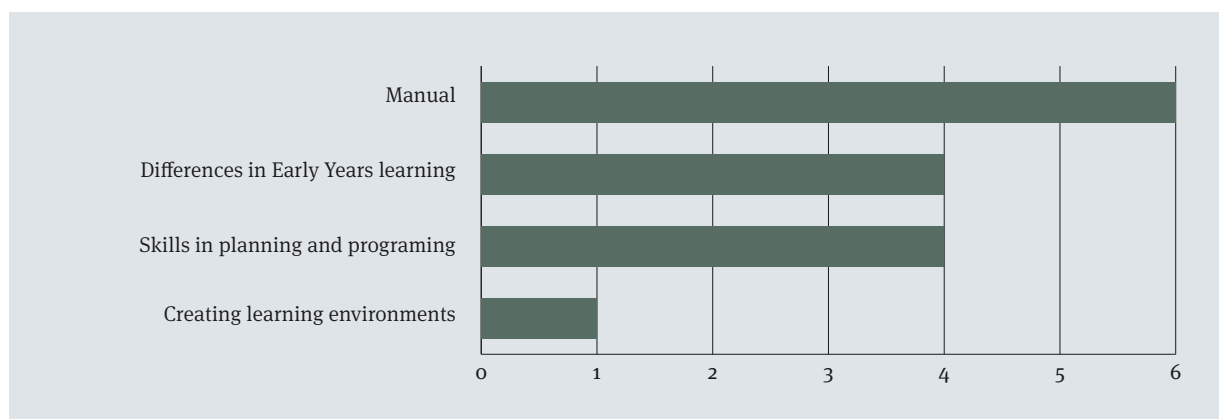


Fig. 4. Most helpful aspect of ECE training
Source: Gulf Workshop Survey

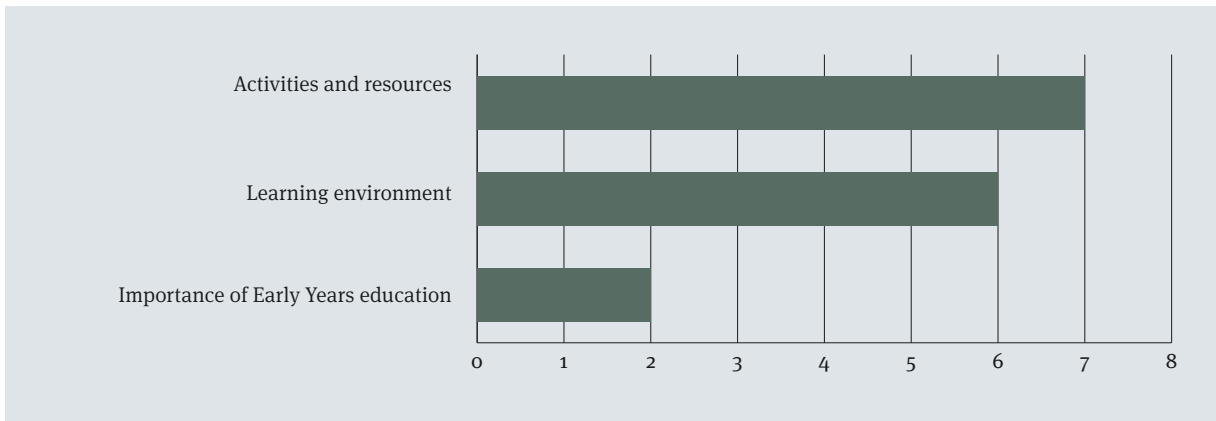


Fig 5. One thing learnt that was empowering to teach ECE?
Source: Gulf Workshop Survey

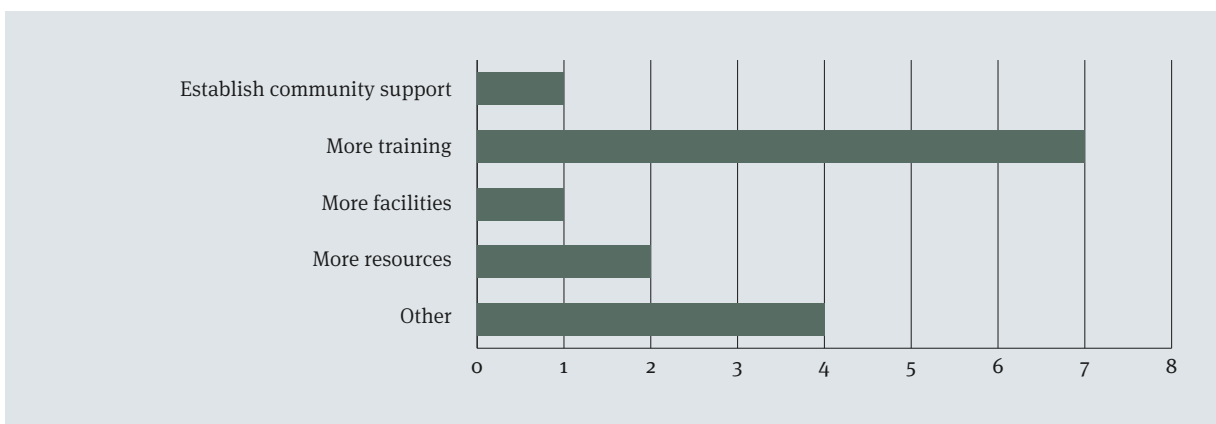


Fig 6. What can KTF do better?
Source: Gulf Workshop Survey

Other workshop surveys for Milne Bay, Mase Elementary and Balimo Elementary, conducted by KTF post-workshop, are summarised in the word clouds provided in Appendix D. They also highlight the importance of the workshops in terms of developing understanding and awareness on ECE. In terms of what KTF can do better, the word clouds emphasise the desire for more time, more training and more resources as well as the involvement of parents and community.

In terms of ways to improve the workshop training and materials, interviews for this review revealed that stakeholders required more clarity on the purpose of ECE education and more information on the timing of implementation. There was a lack of awareness on the national education restructure and some confusion as to the purpose of the training. There is a risk that teachers perceive ECE as a donor-initiated program, rather than directly responding to the restructure.



Image 3: ECE play ideas

It is recommended that more information be provided to trainers and teachers on the NEP, the 3-6-6 restructure and implications for schools and early learning. This background and context will help stakeholders envisage what steps need to be taken to implement changes in response to the NEP.

We need to be able to see which schools qualify for early childhood. For future training it would be good to include the standards requirements policy so we know how to assess if a school is ready to implement the program, secondly the age level of students, and thirdly, how NGOs come in and finally how churches are tied into the policy.

-TRAINER

Other education tools offered by the program have included exchange programs, ECE frameworks, and ECE cube resources. Figure 7 shows the growth of these outputs over the years 2019, 2020 and 2021. The 2019 exchange programs where teacher trainers were invited to Australia to learn from expert educators and visit Australian early years programs provided teacher trainers and senior educators with exposure to different kinds of schools, and other teaching methods. These, however, were suspended in 2020 due to COVID-19 travel restrictions. In 2020 and 2021 KTF pivoted and focused on the development of ECE provincial frameworks to help provincial government design ECE curriculum. Cube resources were also delivered to schools in 2021, which included teaching aids and equipment.

I was given a handout for the program and a box of things inside for children – linking cubes, paint brushes, markers and other things.

-TEACHER

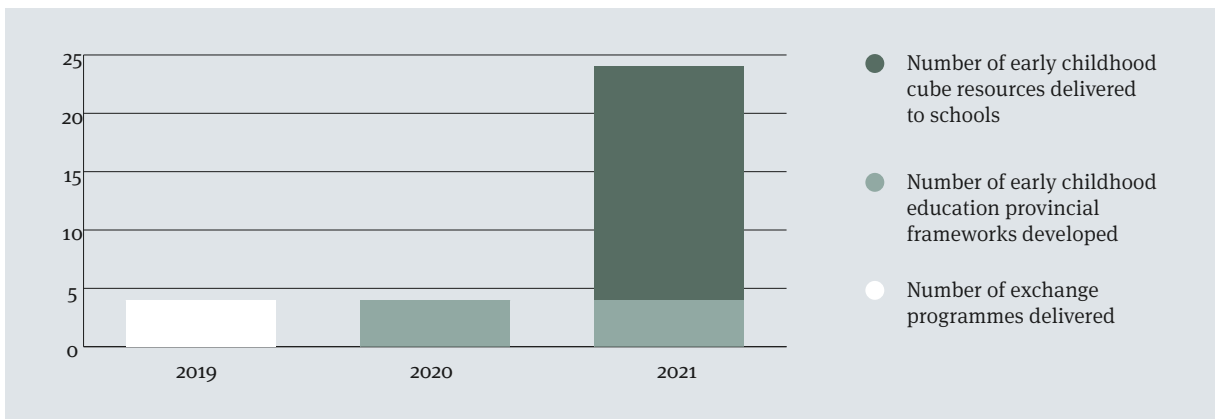


Fig 7. Early Years Education Resources

OUTCOME 8

In terms of children accessing early education (Outcome 8) KTF installed play equipment across 6 schools in 2021 and 2 schools in 2020. Already, equipment has been installed in a school at Gulf Province in 2022. Two schools contacted through this review had operational early years programs – as described in Figure 8.

PROVINCE	SCHOOL	OPERATIONAL	UPDATE
<i>Gulf</i>	Kerema Elementary School	✓	The head teacher of the Early Years program was the first ever early childhood graduate from the University of Goroka. He attended a 1-week workshop in 2021 with another 15 teachers. The KTF carpenter made a play space with a seesaw, and other activities for children and KTF also provided booklets for EY learning and curriculum. When the program first began the parents were not keen but after doing some awareness raising, more children began to join the program with currently around 60 girls and boys attending. Space remains an issue with so many students.
<i>Central</i>	Gavuone Elementary School		Found the workshop interesting and practical and provided a good understanding about the difference between early years learning and formal education for older children. The challenge they have is that there is no site to establish the school. The school has no space. Also, the community lack awareness on the importance of ECE.
<i>Milne Bay</i>	Alotau Elementary School		Has play area set up but not ECE program as yet. Still looking for space. Also needs support to raise community awareness.
<i>Western province</i>	Mase Elementary School		Equipment used by elementary school children, no ECE program yet. Need a classroom and community support.
<i>Western Province</i>	Balimo Elementary School	✓	Equipment used and ECE program set up with prep program at elementary school. No specific space for younger children. Children are 6-7 (80 students) and younger ones 4-5 (12 students).

Fig.8. Status of ECE in schools interviewed in the review

The biggest obstacle to the implementation of ECE programs, as identified to this review by teachers trained in ECE, was space. This is a very common concern for schools in PNG with not enough schools or teachers due to the growing youth bulge.

Those with operational programs interviewed for this review said their space was cramped. The teacher at Kerema Elementary School said his space was narrow and children were running into each other. He was very keen to identify more space for the program. Balimo Elementary said that the ECE children were housed with the prep children, with over 90 children in her classroom, (80 preps and 12 ECE children).



Image 4. Early Childhood Program in action

Other schools that had not yet established the ECE program said the biggest obstacle was identifying a building or space to house the program.

After the workshop, we haven't moved yet because the space is an issue. Need to identify an area.

– TEACHER

From the community, we need the infrastructure, buildings, creating an environment where the learning is possible for the little children, where they support the teachers, restrooms, help teachers to put up an area. We need the school to help provide unused equipment or materials that can be useful for the children.

– TRAINER

Community support was the second biggest obstacle to the implementation of the program.

Teachers told the review that while they could appreciate clearly the merits and benefits of ECE, the rest of their community would take convincing.

KTF could consider developing a PNG appropriate, PNG-based video on early years learning to help explain what early years education is, why it is important and what the community needs to do to help implement the program. Alternatively, KTF could explore other options to support teachers to raise awareness at their schools in order to increase awareness and community understanding of the benefits of early learning.

The best possible way to promote ECE awareness is for trainers like us to get out to the communities and give video shows or provide posters or presentations.

– TRAINER

KTF has recently commenced a process of follow-up with schools where Early Years play equipment has

been installed and ECE training provided. Quarterly check-ins with these schools would help KTF identify how schools are using the equipment and how schools are implementing their knowledge of ECE. Balimo Elementary's teacher was so inspired to teach the younger children she incorporated them into her class for 6-7 year olds, increasing her class size to over 90 children. She could be better supported by KTF to identify other ways of reaching out to the younger cohorts (for example, different time slots) if there is no space to accommodate them in her school appropriately.



Image 5: Sandpit constructed by KTF with community help to support early childhood education.

KTF should also ensure that it more explicitly involves women in its training workshops. It is recommended that at least 50% of the teachers and trainers invited are women. It is also important that community awareness raising for the program is not only for women and mothers. KTF should ensure that community awareness presentation participants are also split evenly between men and women.

The needs of 3-5 year old boys and girls should be considered in the design of ECE programs and infrastructure as well as the needs of children with disabilities. How to address and accommodate these needs should be explicitly taught in any training program.

4/5

Effectiveness is scored 4/5 because the program is meeting outcomes 2 and 3 to a high standard. It is not meeting outcome 8 effectively but is on track to do so once the education restructure takes place.

Efficiency

Are the activities cost-efficient and do they deliver on intended outputs in a timely manner?

The infrastructure provided to the communities in the form of swings, sand boxes, desks and child-size furniture has been highly valued by all participants. In schools where the ECE program is yet to commence, Mase Elementary School for example, this infrastructure is being used by elementary school students. While not the intended users of the infrastructure, it is appropriate that the equipment is being used and enjoyed by young children who have never had the opportunity to use this equipment before.

Teachers also receive manuals on the pedagogical basis of equipment and tablets with podcasts and videos explaining the basis of ECE. Quarterly check-

ins with teachers in receipt of the infrastructure and tablets would be valuable to follow up on the use of the equipment and whether there are broader impacts. For example, does the provision of play equipment increase school attendance generally? Does the provision of the tablet provide teachers access to a wide range of tools to support their professional development? Does it enable teachers to communicate more easily with each other to promote educator collaboration?

4/5

Efficiency is scored 4/5 because the program is an efficient use of resources with limited outlay by KTF. Follow-up with schools and teachers would help identify whether the resources were being used effectively to ensure value for money.

Impact

What difference does the intervention make?

KTF's program is highly impactful on the trainers and teachers that have the opportunity to partake in their Early Years training program. Teachers consulted for this review reported that the workshop opened their eyes to play-based learning and the different types of education that matter most for young children.

Schools and children have been positively impacted by the installation of Early Years play equipment. This may have increased school attendance and follow up by KTF on unanticipated impacts is recommended.

The objective of this review was to assess KTF's support to teacher training and awareness raising as opposed to evaluating the quality of the early learning interventions that have been established. It is recommended that a review of the program

at the centre-level take place in 12 months' time to assess the quality of the education provided and the broader impacts on children, their parents and the community. It would be interesting and important, for example, to see if there were secondary impacts on family views on education; ability to earn a wage afforded by the child-free time (particularly of mothers); increased understanding of positive parenting behaviours. KTF could conduct an annual parent survey to identify these changes.

3/5

Impact is scored 3/5 because the program's full impact on children, families and communities is yet to be seen. The training is clearly impactful on trainers and teachers, with significant potential for further follow-up and support to build on these initial outcomes.

Coherence

How well does the intervention fit?

The program complements KTF's other program offerings in the education sector. KTF has been able to successfully leverage its experience and relationships to offer ECE support in a format they had already been developing under the Teach 4 Tomorrow program.

The program is aligned with the national government's ECE policy, approved by the National Executive Council in August 2020. That said, the slow rollout of the ECE policy has reduced the effectiveness of the program as the pace of awareness raising achieved by KTF has not been matched by the national government's policy development and implementation.

The model is strongly guided by, and dependent on, the articulated needs of each province. With responsibility for implementing the policy, the program supports Provincial governments to develop ECE curriculum and train teachers in ECE. The program is welcomed by the provincial governments as they recognise the need for support to implement ECE programs.

“The early years is a new concept and because of that, they were more appreciative of our help.”

– KTF MANAGER ON RELATIONSHIP WITH PROVINCIAL GOVERNMENTS.

More coherence could be developed by ensuring the program aligns with the restructure at the school level. One provincial education teacher trainer recommended that KTF should encourage the involvement of the standards officers and primary school inspectors in the training because Early Years programs will be overseen by them, and they need to know what ECE should look like. There's a risk that without that education, standards officers or inspectors may incorrectly perceive the informal style of ECE as not meeting appropriate standards.

5/5

Coherence is scored 5/5 because the program is strongly aligned to the National Education Policy and is highly responsive to provincial government needs.

Sustainability

To what extent will the benefits of the project continue after the donor funding ceases?

The program's close partnership with provincial governments helps support the sustainability of the goals it seeks to achieve. Leveraging financial support from other partners, including private sector partners (such as Newcrest Mining), and support from churches, also helps to ensure the program can continue after KTF funding ceases.

KTF's support of the ECE frameworks, curriculum development and workshop training programs are inputs that can be replicated and scaled without significant cost to other provincial governments or other groups interested in promoting ECE in PNG. Training of Provincial Education Teacher Trainers can be scaled up through a train the trainer model in coming years.

Ongoing sustainability of the program would be promoted through ensuring that the infrastructure built by KTF such as the children's play equipment and classroom furniture, could be easily replicated. KTF could consider training carpenters in each province to build ECE-specific infrastructure, such that, when ECE programs are scaled throughout the country, provinces have the technical capacity to replicate construction of the equipment the children enjoy and value the most.

4/5

Sustainability is scored 4/5 because the program is easily replicable, and products developed by KTF can be shared across provinces.

Recommendations

The review finds that KTF’s ECE program is a relevant and effective vehicle to promote ECE in PNG. Given the scale of the school reform in PNG and the need for significant investment and training to achieve the ECC goals of the PNG government, the program is timely and addressing a significant need in PNG.

Aimed at preparedness and awareness at this critical juncture in PNG’s transition to a new education structure, the program successfully promotes greater understanding of ECE. The workshops are highly impactful on those trainers, teachers and community members that attend, opening many eyes to the importance of early years learning in terms of brain development and cognition and promoting sustainable, locally-appropriate ways to encourage healthy play and learning.

A total of 356 trainers and teachers have been educated on ECE and its benefits since 2019, ensuring that many education authorities in PNG have a solid understanding of what effective ECE looks like and how it could be implemented in the PNG context.

KTF has successfully supported the commencement of two ECE programs in PNG and the installation of equipment and delivery of teacher training at many more schools across 7 Provinces. Importantly, the Early Years program has catalysed discussion on ECE among several additional schools and supported provincial governments in gradually progressing its implementation.

Further implementation of ECE programs, however, is hampered by the slow rollout of national government ECE policy and the associated 3-6-6- school restructure. It is difficult for communities to envisage how they can implement the program in practice without the space and qualifications to do so.

Given this context the review finds two potential areas of focus for KTF’s program going forward:

FOCUS AREA 1: GO WIDE: KTF’S EARLY YEARS PROGRAM BROADENS ITS REACH

All teachers interviewed for this review, even those successfully running their own ECE programs, reported that significant work was required to get their community onboard with ECE. ECE is new and understanding is limited. The current program relies, to some extent, on a subset of teachers and community members being able to convince their community of the benefits of ECE, drawing on the resources provided by KTF. Elementary school teachers often lack the authority and opportunity to influence the views and opinions of their community leaders and the views of their parents, particularly in rural and remote areas where access to information is limited.

KTF should broaden the reach of its education program to a wider audience that includes community leaders and parents. KTF’s increased support of awareness raising on ECE will help mitigate the high risk of low attendance at ECE programs, once the school restructure is rolled out and ECE is mandated PNG-wide. Consideration could be given to the creation of a PNG-based, PNG-appropriate video to explain the benefits of early learning that could be shown to community members and parents. Alternatively, KTF could work with provincial trainers to determine other methods of communicating key messages to this wider audience. Provincial trainers



Image 7: KTF Early Years graduates

could be supported (through resources for travel, logistics and the hosting of the communication event) to visit schools and conduct awareness to the broader community (not just the teachers) which will catalyse local conversations on ECE.

A key aspect of this heightened communication approach also requires KTF, and its provincial trainer partners, to explicitly communicate that ECE is a national government policy that will soon be implemented nation-wide. This mitigates the possible perception that ECE is a donor-led initiative. It also helps clarify for teachers, schools, and communities the timeframe for implementation and the purpose of the training and information that is being provided.

One final element of this focus area is the need for KTF to work with the provincial trainers, teachers and schools, particularly in rural and remote areas, to elevate their voices and advocate to the NDOE on some of the impacts of the 3-6-6 restructure. With the rising youth bulge, the PNG education system is already significantly under-resourced, and the introduction of ECE is likely to exacerbate these issues and put further strain on stretched education resources –physical, human and financial. KTF should support education leaders across the provinces to advocate to the NDOE on the importance of preparedness for the restructure to ensure its wide ranging implications are taken into account.

FOCUS AREA 2: GO DEEP: KTF'S EARLY YEARS PROGRAM DEEPENS ITS INVESTMENT IN PILOT PROGRAMS.

This may require KTF to support fewer but more comprehensive demonstration programs that other schools, community leaders, and provincial authorities, can visit and learn from. For this to occur:

- **KTF should become more involved in the selection of the ECE pilot program locations.** It is important to draw on the advice of the provincial education teacher trainers who are very well placed to guide these decisions, but KTF should also establish its own criteria as to which schools are best supported. KTF should consider the following criteria:
 - » Space to run a ECE program – if elementary school buildings space does not allow, could the community identify alternative timing whereby smaller children start earlier or later or use indoor facilities while children play

outside? Or alternative building structures? Identification of adequate space is an important step from a safety and viability perspective.

- » Logistics and ease of transport for installation of equipment
- » Passionate teachers who could champion ECE. Ideally those with a stronger skill-base and/or qualified ECE teachers.
- » Ease of transport for other community leaders/teachers/provincial authorities to visit the pilot school for information gathering and learning.

- **KTF should check-in with schools at quarterly intervals.** KTF should follow up quarterly with the ECE programs once equipment has been installed to trouble shoot any concerns and monitor implementation. Quarterly check-ins would provide teachers the opportunity to ask questions and get support, if required. It would also enable KTF to monitor the impact of the training, and educational tools provided under the program to improve its program monitoring and learning, including the way the needs of girls and children with disabilities were being considered in program design and implementation. KTF could also start WhatsApp or Facebook groups to assist its communication with schools and also promote networking between ECE teachers.
- **KTF should build on its ECE foundations.**
 1. Use these pilots as demonstration programs and arrange transportation for school teachers and community leaders to come and see them work in practice.
 2. Evaluate the success of the ECE pilot program after 12 months of operation to identify the impacts on children, carers and the community. This will help identify what is working and what obstacles remain. It will also ensure the quality of the program is at the expected level and KTF is comfortable that it is being run consistent with its training.
 3. Support other communities to establish programs in their schools, including through teaching relevant skills such as carpentry for construction of swings and seesaws and other child-centred infrastructure.

-
4. Ensure other members of the education system are instructed in ECE, such as school inspectors.

Subject to available resources, the review has identified a clear need for investment in both focus areas above. Awareness raising is important to achieving the widescale ambition envisaged for ECE in PNG, and a necessary step to building support for quality ECE in PNG, particularly in rural and remote areas (which are a critical aspect of KTF's mission). Awareness raising alone, however, will not achieve the rapid investment and implementation of quality ECE practices needed to deliver results. Accordingly, this review also recommends greater investment focused on the delivery of quality ECE pilot programs which can be used as demonstration projects to further the goal of awareness raising, while at the same time building ECE capacity and delivery in PNG.

Chronological steps to implement these recommendations are provided in Appendix E.

Appendix A Methodology

THIS EVALUATION

The purpose of this evaluation is to examine the impact and effectiveness of KTF's Early Years program on improving ECE knowledge and skills among trainers, teachers, and other partners. This evaluation is a program evaluation of teacher training and awareness raising rather than an early childhood program evaluation (focused on child learning and development), which would be more appropriate once ECE programs are fully implemented.

EVALUATION CRITERIA

This evaluation draws on the Organisation for Economic Cooperation and Development's (OECD) evaluation guidance on using and applying evaluation criteria. The OECD recommends six categories of evaluation criteria – relevance, coherence, effectiveness, efficiency, impact, and sustainability. These criteria provide a set of lenses to understand and analyse an intervention.

- Relevance: are the project's aims and objectives still relevant and important and are the project activities consistent with the aim of the project?
- Effectiveness: is the project achieving its intended objectives; what has happened as a result of the project?
- Efficiency: are the activities cost-efficient and do they deliver on intended outputs in a timely manner?
- Impact: what difference does the intervention make?
- Coherence: how well does the intervention fit?
- Sustainability: to what extent will the benefits of the project continue after the donor funding ceases? What are the recommendations for ongoing sustainability of the program?

The program's responsiveness to each criterion is assessed through an evaluation rubric, scoring the criteria 1 – 5 (see Appendix C).

CONSULTATIONS

Consultations, drawing on indicative consultation questions provided in Appendix B, were held with teachers and provincial education teacher trainers from five provinces:

- » Gulf Province;
- » Central Province;
- » Milne Bay Province;
- » Morobe Province; and
- » Western Province.

Five teachers (4 male and 1 female) were interviewed from different elementary schools across the provinces as well as 5 provincial education teacher trainers (2 male and 3 female). The schools were selected based on where KTF-supported ECE infrastructure had been placed. KTF staff based in Australia and Port Moresby were also interviewed for this review.

SURVEYS AND LITERATURE REVIEW

The review drew on data from a range of written sources including KTF-provided documentation:

- KTF 2021 Effectiveness Results (draft);
- Teach for Tomorrow Early Years Project Design; and
- Workshop evaluations from:
 - » New Ireland Province;
 - » Central Province Gavuone;
 - » Central Province Papa Lealea
 - » Milne Bay Province
 - » Morobe Province;
 - » Gulf Province;
 - » Balimo Western Province; and
 - » Mase Balimo Western Province.

The review also drew on external sources appropriate to the review:

- DFAT 2022, Wok Wantaim Long Strongem Edukeisen, PNG Partnerships for Improving Education
- United Nations Children’s Fund, 2019, A World Ready to Learn: Prioritizing quality early childhood education, UNICEF, New York, April 2019.
- National Research Institute, “Is it the right time to implement the new 1+6+6 basic education system in PNG? ” Spotlight, April 2021
- DFAT, Investing in Teachers, December 2015

LIMITATIONS

As the review was conducted remotely, with online consultations, the data is possibly not as complete and rich as it would have been if field visits and face to face interviewing had been undertaken, due to the loss of observational data from field visits. It would have been preferable to interview teachers, provincial education teacher trainers, and community members in person, onsite and to view the space set aside for the early learning program in the school communities.

The review was limited by the availability of financial data. It is unable therefore to comment more specifically on the financial sustainability of the program. It also limits insights into the program’s efficiency and value for money.

The review was also limited by a lack of information on the impact of the early learning program on children, their families and the broader community. Significant research supports the importance of quality early childhood development programs to increase the chances of children reaching their development potential. At the time of this review, few early years programs were up and running, and those that were, had not been operational for long or had been disrupted by COVID-19 closures. An assessment of the early learning programs themselves, after at least one year of operation, would provide more information on the actual impact of the program on children, their families and community.

Appendix B

Indicative consultation questions

RELEVANCE: *are the project's aims and objectives still relevant and important and are the project activities consistent with the aim of the project?*

- Does the province need/want an Early Learning Program?
- Is the Early Years program relevant to children, relevant to the needs of the community? Relevant to the province?
- Is the Early Years program necessary? To children, relevant to the needs of the community? Relevant to the province?
 - » numbers enrolled
 - » teachers trained
- Does it do what it is meant to do? Are teachers better equipped to teach young children?

EFFECTIVENESS: *is the project achieving its intended objectives; what has happened as a result of the project?*

- Is it effectively supporting early childhood teachers?
- Are provinces better prepared to support early childhood learning?
- Are younger children better supported to learn?
- Does it help strengthen the province's response to the new EY policy?

EFFICIENCY: *are the activities cost-efficient and do they deliver outputs in a timely manner?*

- Does the program operate efficiently?

IMPACT: *what difference does the intervention make?*

- Are children better off?
- Are communities better off?
- Are provincial governments better supported?
- Are children better prepared for primary school?

COHERENCE: *how well does the intervention fit?*

- Does it align with national government policy?
- Does it align with provincial education priorities?
- Does it align with community priorities?

SUSTAINABILITY: *to what extent will the benefits of the project continue after the donor funding ceases? What are the recommendations for ongoing sustainability?*

- What would happen if donor funding ceased?
- How can the program operate without donor funding?
- How can the program become more sustainable?
- What would happen if KTF did not assist the provinces to adopt early years learning?

Appendix C

Scoring of criteria

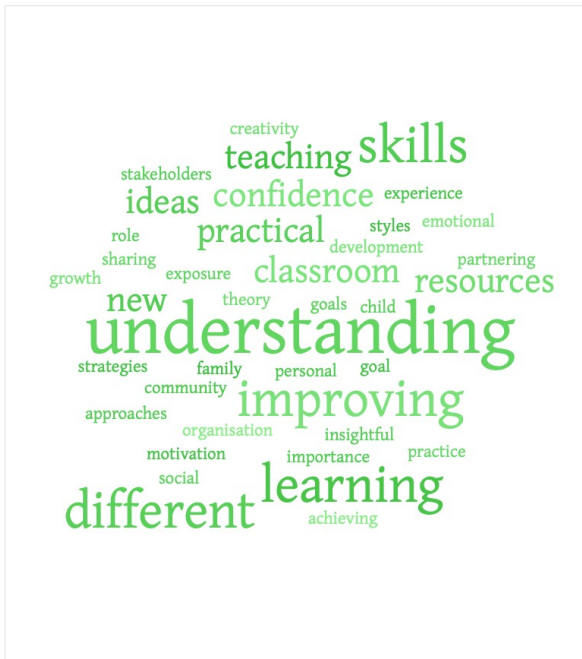
Score out of 5	1	2	3	4	5
Relevance	The project's aims and objectives are not relevant or important and not consistent with the aims of the project.	The project's aims and objectives are only slightly relevant and slightly consistent with the aims of the project.	The project's aims and objectives are relevant and consistent with the aims of the project.	The project's aims and objectives are truly relevant, important, and very consistent with the aims of the project.	The project's aims and objectives are highly relevant and incredibly important and completely consistent with the aims of the project.
Effectiveness	The project has not achieved its intended objectives.	The project has fallen short of achieving its intended objectives.	The project has gone a long way toward achieving its intended objectives.	The project has achieved its intended objectives.	The project has thoroughly achieved its intended objectives.
Efficiency	The activities are not cost-efficient, and they do not deliver on intended outputs in a timely manner.	The activities are only slightly cost efficient and only slightly deliver on intended outputs in a timely manner.	The activities are reasonably cost-efficient, and they deliver on intended outputs in a mostly timely manner.	The activities are cost-efficient, and they deliver on intended outputs in a timely manner.	The activities are extremely cost-efficient, and they deliver on intended outputs in a timely manner.
Impact	The intervention generates broader negative impacts.	The intervention generates slightly negative impacts.	The intervention generates moderately positive impacts.	The intervention generates positive impacts.	The intervention generates extremely positive impacts on a broad and transformative scale.
Coherence	The intervention does not fit and is not consistent internally or externally.	The intervention only slightly fits and is only slightly consistent internally or externally.	The intervention mostly fits and is mostly consistent internally and externally.	The intervention fits and is consistent internally and externally.	The intervention fits and is extremely consistent internally and externally.
Sustainability	The project is not sustainable and funding sources are very limited.	The project is not very sustainable, and funding is difficult.	The project is sustainable, and funding is available, but donor funding is still the major source of total funding.	The project is -sustainable but relies on some donor support.	The project is entirely self-sustaining.

Appendix D

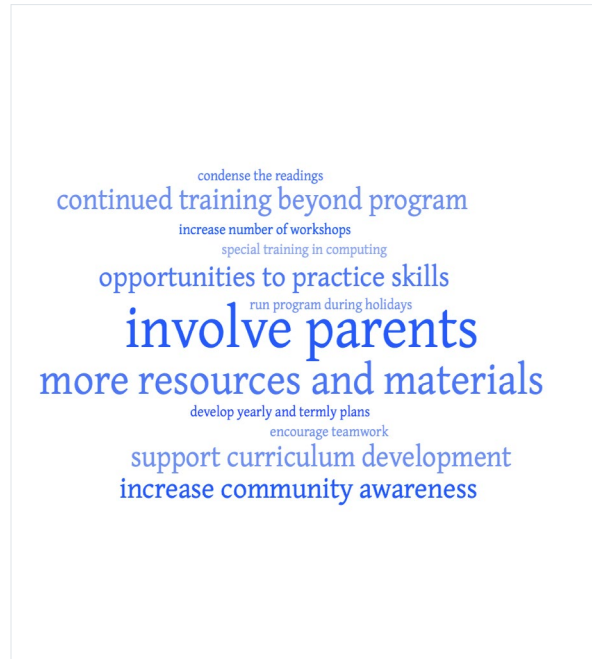
Workshop summary

word clouds

What are the most helpful aspects of the training? Milne Bay, Mase and Balimo responses.



How can we improve the training? Milne Bay, Mase and Balimo responses.

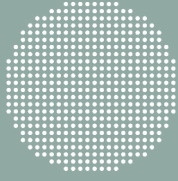


Appendix E

Chronology of recommendations

While this review recommends a range of actions to improve program performance, the following 4 steps are most highly recommended in the short term.

1. Follow up with all schools that have received equipment to determine what has happened, how has the equipment been used and are there plans for implementation of ECE? This will help inform the broader program design, in particular steps 2 and 3.
2. Develop a strategy to broaden KTF's focus on community engagement. Work with provincial education teacher trainers to determine how best to communicate these messages to parents and the broader community. What do teachers and trainers need to reach the wider community audience? This may mean support for logistics and transport. It may also include communication material such as videos or posters. It may require KTF's hands-on involvement in the first instance.
 - » KTF should ensure that the national education restructure is explained explicitly in workshops to contextualise the ECE training to participants.
3. In terms of establishing ECE in new provinces slated for implementation in 2022, KTF should be more involved in site selection and ongoing development of ECE pilot programs. If space does not permit an ECE to be established, then KTF should identify alternative arrangements in terms of timing or other options.
4. KTF should work to elevate the voices of provincial trainers, teachers and schools, particularly those in rural and remote areas, to support them to raise with the NDOE their concerns on the impact of the 3-6-6 restructure on limited education resources.



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