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Report No: PAD3593

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED GRANT

IN THE AMOUNT OF SDR 10.3 MILLION
(US\$14 MILLION EQUIVALENT)

TO

TUVALU

FOR A

TUVALU LEARNING PROJECT

May 14, 2020

Education Global Practice
East Asia and Pacific Region

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CURRENCY EQUIVALENTS

(Exchange Rate Effective {March 31,2020})

Currency Unit = AUD

AUD1.48 = US\$1

US\$1.3648 = SDR 1

FISCAL YEAR

January 1 - December 31

Regional Vice President: Victoria Kwakwa

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ABBREVIATIONS AND ACRONYMS

ASET	Australian Support to Education in Tuvalu
AUD	Australian Dollar (currency)
CDU	Curriculum Development Unit
CLRW	Come Let's Read and Write
CQS	Consultant Qualification Selection
CPBA	Community Play-Based Activity
CPD	Continuous Professional Development
CPMO	Central Project Management Office
CPU	Central Procurement Unit
CWPM	Correct Words Per Minute
DFAT	Australian Department of Foreign Affairs and Trade
E&S	Environmental and Social
ECCE	Early Childhood Care and Education
ECE	Early Childhood Education
EGRA	Early Grade Reading Assessment
ESCP	Environmental and Social Commitment Plan
EQAP	Education Quality and Assessment Programme
FM	Financial Management
FPDVA	Family Protection and Domestic Violence Act 2014
GBV	Gender-Based Violence
GDP	Gross Domestic Product
GFDRR	Global Facility for Disaster Reduction and Recovery
GRS	Grievance Redress Service
HCI	Human Capital Index
IBRD	International Bank for Reconstruction and Development
ICT	Information and Communications Technology
IDA	International Development Association
IFR	Interim unaudited Financial Report
M&E	Monitoring and Evaluation
MELE	Measuring Early Learning Environments
MEYS	Ministry of Education, Youth and Sports
MICS	Multiple Indicator Cluster Survey
MLGA	Ministry of Local Government and Agriculture
MOF	Ministry of Finance
MOHSWGA	Ministry of Health, Social Welfare and Gender Affairs
NER	Net Enrollment Rate
NSSD	National Strategy for Sustainable Development
PACREF	Pacific Regional Education Framework
PBM	Positive Behavior Management
PDO	Project Development Objective

PEARL	Pacific Early Age Readiness and Learning
RFB	Request for Bids
RFQ	Request for Quotations
PILNA	Pacific Islands Literacy and Numeracy Assessment
PISA	Programme for International Student Assessment
PPSD	Project Procurement Strategy for Development
PRAT	Pupil Rapid Assessment Test
PTA	Parent Teacher Association
RPF	Regional Partnership Framework
SDR	Special Drawing Right
SEP	Stakeholder Engagement Plan
SIS	Small Island States
SOP	Standard Operating Procedures
SPC	The Pacific Community
SSU	School Supervisory Unit
STEP	Systematic Tracking of Exchanges in Procurement
TA	Technical Assistance
TEMIS	Tuvalu Education Management Information System
TESP	Tuvalu Education Sector Plan
TIMSS	Trends in International Mathematics and Science Study
TJC	Tuvalu Junior Certificate
TNCPF	Tuvalu National Curriculum Policy Framework
TRP	Tuvalu Reading Program
TuEGRA	Tuvalu Early Grade Reading Assessment
TuEHCI	Tuvalu Early Human Capital Index
TuLEP	Tuvalu Learning Project
TVSD	Technical and Vocational Education and Training Department
UNICEF	United Nations International Children's Fund
USP	University of the South Pacific
WB	World Bank

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DATASHEET

BASIC INFORMATION

Country(ies)	Project Name	
Tuvalu	Tuvalu Learning Project	
Project ID	Financing Instrument	Environmental and Social Risk Classification
P171681	Investment Project Financing	Low

Financing & Implementation Modalities

<input type="checkbox"/> Multiphase Programmatic Approach (MPA)	<input type="checkbox"/> Contingent Emergency Response Component (CERC)
<input type="checkbox"/> Series of Projects (SOP)	<input checked="" type="checkbox"/> Fragile State(s)
<input type="checkbox"/> Performance-Based Conditions (PBCs)	<input checked="" type="checkbox"/> Small State(s)
<input type="checkbox"/> Financial Intermediaries (FI)	<input type="checkbox"/> Fragile within a non-fragile Country
<input type="checkbox"/> Project-Based Guarantee	<input type="checkbox"/> Conflict
<input type="checkbox"/> Deferred Drawdown	<input type="checkbox"/> Responding to Natural or Man-made Disaster
<input type="checkbox"/> Alternate Procurement Arrangements (APA)	

Expected Approval Date	Expected Closing Date
05-Jun-2020	31-Dec-2025

Bank/IFC Collaboration

No

Proposed Development Objective(s)

To improve the readiness of children entering first grade and improve the reading skills of students.

Components

Component Name	Cost (US\$, millions)
Strengthening early childhood care and education and school readiness for all children	1.80



Improving Literacy Outcomes in all Schools	4.10
Research, learning assessment and policy review	3.60
Strengthening institutional capacity, monitoring and evaluation, and education sector management	4.50

Organizations

Borrower:	Tuvalu
Implementing Agency:	Ministry of Education Youth and Sports Ministry of Finance

PROJECT FINANCING DATA (US\$, Millions)

SUMMARY

Total Project Cost	14.00
Total Financing	14.00
of which IBRD/IDA	14.00
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Development Association (IDA)	14.00
IDA Grant	14.00

IDA Resources (in US\$, Millions)

	Credit Amount	Grant Amount	Guarantee Amount	Total Amount
Tuvalu	0.00	14.00	0.00	14.00
National PBA	0.00	14.00	0.00	14.00
Total	0.00	14.00	0.00	14.00

Expected Disbursements (in US\$, Millions)

WB Fiscal Year	2020	2021	2022	2023	2024	2025	2026
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Annual	0.00	0.69	1.07	1.77	3.29	4.41	2.77
Cumulative	0.00	0.69	1.76	3.53	6.83	11.23	14.00

INSTITUTIONAL DATA

Practice Area (Lead)

Education

Contributing Practice Areas

Climate Change and Disaster Screening

This operation has been screened for short and long-term climate change and disaster risks

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

Risk Category	Rating
1. Political and Governance	● Moderate
2. Macroeconomic	● Moderate
3. Sector Strategies and Policies	● Moderate
4. Technical Design of Project or Program	● Substantial
5. Institutional Capacity for Implementation and Sustainability	● Substantial
6. Fiduciary	● Substantial
7. Environment and Social	● Low
8. Stakeholders	● Moderate
9. Other	
10. Overall	● Substantial

COMPLIANCE

Policy

Does the project depart from the CPF in content or in other significant respects?

Yes No



Does the project require any waivers of Bank policies?

[] Yes [✓] No

Environmental and Social Standards Relevance Given its Context at the Time of Appraisal

E & S Standards	Relevance
Assessment and Management of Environmental and Social Risks and Impacts	Relevant
Stakeholder Engagement and Information Disclosure	Relevant
Labor and Working Conditions	Relevant
Resource Efficiency and Pollution Prevention and Management	Not Currently Relevant
Community Health and Safety	Not Currently Relevant
Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Not Currently Relevant
Biodiversity Conservation and Sustainable Management of Living Natural Resources	Not Currently Relevant
Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	Not Currently Relevant
Cultural Heritage	Not Currently Relevant
Financial Intermediaries	Not Currently Relevant

NOTE: For further information regarding the World Bank’s due diligence assessment of the Project’s potential environmental and social risks and impacts, please refer to the Project’s Appraisal Environmental and Social Review Summary (ESRS).

Legal Covenants

Sections and Description

Section I.A.1 of Schedule 2 to the Financing Agreement: The Recipient shall, by no later than three (3) months after the Effective Date, establish and thereafter maintain until the Closing Date, a Steering Committee, with a mandate, composition and resources satisfactory to the Association.

Sections and Description

Section I.A.3 of Schedule 2 to the Financing Agreement: The Recipient shall: (a) by no later than three (3) months after the Effective Date, recruit or appoint a Project Coordinator and a Deputy Project Coordinator within the Ministry of Education, Youth and Sports, each with terms of reference, qualifications and experience satisfactory to



the Association who shall be responsible for the day-to-day coordination of the implementation of Parts 1, 2, 3 and 4.1 of the Project; and (b) thereafter maintain such positions until the Closing Date.

Sections and Description

Section I.A.5 of Schedule 2 to the Financing Agreement: The Recipient shall, by no later than three (3) months after the Effective Date, establish and thereafter maintain until the Closing Date, a Central Project Management Office (CPMO) within the Ministry of Finance, with mandate, composition and resources satisfactory to the Association.

Sections and Description

Section I.A.6 of Schedule 2 to the Financing Agreement: The Recipient shall, by no later than three (3) months after the Effective Date, recruit or appoint a procurement advisor within the CPMO with terms of reference, qualifications and experience satisfactory to the Association, and thereafter maintain such position until the Closing Date.

Sections and Description

Section I.B of Schedule 2 to the Financing Agreement: The Recipient shall prepare and, by no later than three (3) months after the Effective Date, adopt a Process and Procedures Manual, in form and substance satisfactory to the Association for the purpose of ensuring proper implementation of the Project.

Sections and Description

Section I.C of Schedule 2 to the Financing Agreement: The Recipient shall prepare and, by no later than three (3) months after the Effective Date, adopt standard operating procedures for the CPMO, in form and substance satisfactory to the Association, for the purpose of ensuring effective institutional arrangements for the day to day operation of the CPMO.

Sections and Description

Section I.D of Schedule 2 to the Financing Agreement: The Recipient shall prepare and furnish to the Association, by not later than August 30 of each year during the implementation of the Project, for the Association’s review and no-objection, an Annual Work Plan and Budget containing all eligible Project activities and expenditures proposed to be included in the Project for the following fiscal year of the Recipient.

Conditions

Type	Description
Disbursement	Section III.B.1. of Schedule 2 to the Financing Agreement: No withdrawal shall be made for payments made prior to the Signature Date, except that withdrawals up to an aggregate amount not to exceed SDR 600,000 may be made for payments made prior to this date but on or after January 1, 2020, for Eligible Expenditures.



I. STRATEGIC CONTEXT

A. Country Context

- 1. Tuvalu is one of the smallest, most remote and climate-change vulnerable countries in the world and is characterized as a fragile state.** Tuvalu is a Pacific Island country of approximately 11,000 people living on nine small islands with a total land area of just 26 square kilometers scattered over 0.5 million square kilometers of the Pacific Ocean. Six of the islands (Nukulaelae, Funafuti, Nukufetau, Vaitupu, Nui, and Nanumea) are low-lying coral atolls, while the other three islands – Niulakita, Niutao, and Nanumaga – are raised limestone reef islands. More than half of the total population live on Funafuti, which is also where the nation’s capital is located. With most of the country lying just above sea level (average elevation is one meter above sea level and highest point just four meters above sea level), Tuvalu is acutely vulnerable to the adverse impacts of climate change and sea level rise. In addition, Tuvalu is exposed to natural hazards including cyclones, floods, storm surges, droughts and tsunamis. For example, on January 17, 2020 Category 3 Tropical Cyclone Tino struck Tuvalu with gale force winds, causing widespread flooding and is estimated to have affected half of the country’s population prompting the Government to proclaim a State of Public Emergency. Tuvalu’s outer islands are only accessible by sea vessel, with scheduled routes operating every few weeks, weather permitting, presenting significant challenges to service delivery.
- 2. The very small size of the domestic economy and Tuvalu’s extreme remoteness from major markets, near total dependence on imports, particularly of food and fuel, and vulnerability to external shocks, climate change and rising sea levels pose significant challenges to macroeconomic performance.** Highly dependent on external aid, as well as remittances from Tuvaluans working abroad, gross domestic product (GDP) growth is constrained by the small size of the domestic economy, limited natural resources (except for fisheries) and infrastructure deficits in utilities, transport and communications. Tuvalu’s GDP growth is estimated at 3.8 percent in 2018, largely driven by infrastructure construction related to Tuvalu hosting the 2019 Pacific Island Forum Leaders Meeting. Inflation is expected to decline from 3 percent per year to 2 percent as economic growth slows. The fiscal deficit is expected to increase to 5 percent of GDP over the medium term. However, there is increased uncertainty due to the ongoing COVID-19 virus closures and restrictions and its potentially large impact on economic growth, fiscal revenues and other macroeconomic indicators. The lack of economies of scale in such a small and fragmented domestic market constrain private sector development and the public sector dominates the economy. The economic and fiscal costs associated with health care expenditures of an aging population and an epidemic of non-communicable diseases further limit macroeconomic performance. The most recent poverty assessment indicates 26 percent of the population was living below the national poverty line (2010). Disparities in levels of poverty have increased over time between the outer islands and Funafuti with poverty generally concentrated in the outer islands. Lack of access to services, employment opportunities and exposure to shocks (such as food price shocks and natural disasters) limits inclusive growth. However, female headed households are less likely to be identified as poor and the gender parity index demonstrates a high level of access to education.
- 3. Te Kakeega III (2016-2020)¹ is the Government of Tuvalu’s National Strategy for Sustainable Development (NSSD) which aims to achieve security and prosperity for all Tuvaluans; higher standards of quality health and education; and good relations with allies on the international stage.** This vision is expected to be realized through: (i) improved resilience, mitigation and adaptation to climate change; (ii) strengthened institutional capacity to serve the public

¹ National Strategy for Sustainable Development 2016-2020. Government of Tuvalu, “Protect and save Tuvalu: Improve the quality of life and prosperity for all.” March 2016.



interest with competence and justice; (iii) sound macroeconomic management and policy; (iv) improved health and social development; (v) strengthened island development policies; (vi) improved private sector, employment and trade; (vii) high quality education to equip people with the knowledge and skills they need to achieve a higher degree of self-reliance in a changing world; (viii) maximization of social and economic returns from the management and sustainable use of Tuvalu's natural resources; (ix) efficient, high quality infrastructure and support services; (x) protection, restoration and sustainable use of terrestrial ecosystems; (xi) addressing internal migration and urbanization; and (xii) conservation of the oceans, seas and marine resources for sustainable development. While the NSSD notes that Tuvalu is performing better than most Pacific countries when it comes to wage employment of women, the strategy strives to improve gender equality and women's empowerment, as well as advancing the legal rights of women. It also aims to ensure gender and disability perspectives are incorporated into disaster risk management. The Tuvalu National Gender Policy Strategic Plan of Action 2016-2020 and Tuvalu's National Policy for Person's with Disability reaffirm commitments to address gender inequality and gender-based violence (GBV) and uphold the rights of persons with disability.

4. **According to the Human Capital Index which measures the amount of human capital that a child born today can expect to attain by age 18, Tuvalu ranks 83rd out of 157 countries.** A child born in Tuvalu today will be 55 percent as productive when he/she grows up as he/she could be if he/she had complete education and full health. The current ranking is skewed by the education challenges. While the average years of schooling in Tuvalu is 11.9 years, the number of quality adjusted learning years is 7.4, meaning children are in school but not learning for the equivalent of nearly 4.5 years, pointing to issues of quality of learning.
5. **The COVID-19 emergency response in Tuvalu has been extensive and successful to date.** At the time of writing, there were no reported cases of the virus and the national lock down instituted on March 24, 2020 has isolated the nation from all air and sea vessels. Schools were closed on March 23, 2020 and social distancing restrictions are in place. The isolation posed by the closing of the airport, however, increases the risks to the importation of food and medicines and the ability for Tuvaluans to seek medical assistance in Fiji and elsewhere.

B. Sectoral and Institutional Context

6. **The Ministry of Education, Youth and Sports (MEYS) is responsible for Tuvalu's education system and policy.** The Government of Tuvalu provides free primary and secondary education for all, which includes Years 1 through 13. By law, it is compulsory for all children ages 6-15 (Years 1 to 10) to attend school. There are 18 Early Childhood Care and Education (ECCE) centers (eight private, four faith-based and six community) providing preschool services for children under 6 years old; eight are on the main island of Funafuti, and at least one on each of the other islands and atolls. All centers have a management board and receive support from the government through grants and teacher salaries, and the Education Department has authority over teacher recruitment, although ECCE teachers are not public servants. There are nine government primary schools (one on each island or atoll) and a faith-based primary school in Funafuti. Students are taught in the local language (*Gana Tuvalu*) for the first three years of primary school, after which they transition to learning in English. Secondary education consists of five years of schooling (Years 9 through 13) and is delivered by two schools - a government-run boarding school on Vaitupu island (Motufoua) and a non-government day school located in Funafuti (Fetuvalu). As a result of a recent decision by the Prime Minister Year 9 students were removed from the high school campus in 2016 and were being taught at primary schools, but this decision was reviewed and reversed in 2019 with Year 9 students returning to the high school campuses in 2020. There is also one center to cater to children and young people with disabilities, Fusi Alofa, but this is not a special school and caters to both school age children and young adults. The Tuvalu Maritime Training



Institute, the only post-primary technical/vocational institution in Tuvalu, is being used for maritime training but the government has plans to introduce additional course offerings there. A technical/vocational stream has been introduced in primary and secondary schools in recent years. The University of the South Pacific (USP) campus on Funafuti is the only tertiary institution in the country. Most secondary school graduates travel abroad for tertiary degrees, and continuous professional development (conducted overseas) is offered to civil servants through study leave often supported either by government and/or development partner scholarships.

7. **Education is a priority sector in Tuvalu.** The education sector absorbs the largest share of the national budget (increasing from 13 percent in 2012 to 18.4 percent in 2019) reflecting its status as a priority sector and biggest public sector employer. Tuvalu's education expenditures are higher than most other Pacific Island Countries, including Tonga (16 percent), Samoa (15 percent), Kiribati (14 percent), and Vanuatu (12 percent).² Official Development Assistance to Tuvalu plays a key role in supporting education investments annually. Government estimates that over 24 percent of student funding in 2017 was contributed by donor partners. The Australian Department of Foreign Affairs and Trade (DFAT) is currently the donor with the largest investments in the education sector. However, the MEYS has steadily increased per-child expenditures since 2012 across all sub-sectors. Average unit costs per student range from AUD1,000 in ECCE to almost AUD4,000 at the secondary level in 2017. Per capita costs have increased considerably since 2012 (AUD728 in 2012 to AUD1,276 in 2017 in primary education), in line with the increase in overall Tuvalu budget, recurrent expenditures and nominal GDP. The unit costs are in line with other small countries, although the allocation to ECCE is considerably higher than other countries in the Pacific.
8. **Near universal access to basic education.** The Tuvalu Education Sector Plan (TESP III), which has been implemented since 2016 outlines an overarching strategy to promote nationwide access to relevant and modern curriculum, quality schooling and efficient and sustainable education systems in Tuvalu. The next plan (TESP IV 2021-2026) will be prepared during 2020 and launched in January 2021. Achievements to date include significant access to pre-primary and primary education and increased primary school completion rates. With a total enrollment of 3,046 in pre-tertiary and 211 qualified teachers³, class sizes and pupil-teacher ratios are low. Net Enrollment Rate (NER) in primary education is 89 percent, surpassing many of the middle-income countries in the Caribbean States. However, Tuvalu's NER in secondary education is only 62 percent (2019), lower than most of the Pacific and other small island states, such as Kiribati (69 percent), Tonga (75 percent) and Samoa (77 percent). Only Melanesian countries have lower rates in the Pacific. Completion rate to Year 8 has increased from 81 percent in 2012 to 92.8 percent in 2017, and transition rate from primary to secondary has increased from 65 percent in 2017 to 81 percent in 2019.⁴ The majority of teachers are female and have the requisite certification/qualification to teach. Out of 211 full time teachers, 167 are female, 55 are teaching in ECCE centers, 106 are in primary schools and 46 in the two secondary schools. There are four teachers in the special needs center. The highest numbers of teachers are on Funafuti and Vaitupu islands where the largest share of students attend school.

Key challenges facing the education sector

9. **Quality of education and low literacy.** The Pacific Islands Literacy and Numeracy Assessment (PILNA) 2018 data indicates that only 32 percent of grade 4 students meet or exceed proficiency level for English literacy (significantly lower than the 57 percent for the small island states (SIS) subregion). Grade 6 results are similarly low at 47 percent

² World Bank 2019; latest UIS data.

³ MEYS 2019

⁴ Tuvalu Education Management Information System (TEMIS), 2019.



achieving proficiency (against 63 percent for the SIS subregion). However, these results represent an improvement over 2015 results which indicated only 22 percent of grade 4 and 33 percent of grade 6 demonstrating proficiency.⁵ Poor outcomes in the early grades result in low pass rates in the Tuvalu Junior Certificate (TJC) examination (Year 10) – just 27 percent in 2019. Passing rates at the end of primary education have fallen from 80 percent in 2017 to 59 percent in 2019. Literacy challenges, however, begin much earlier, with Early Grade Reading Assessment (EGRA) 2016 results indicating only 20 percent of Year 3 students meeting the benchmark for reading comprehension in local language (the language of instruction until the end of Year 3 before bridging to English), and 40 percent with zero scores for reading comprehension. Students fare better on numeracy than on literacy assessments. In the 2018 PILNA assessment, approximately 69 percent of Year 4 students performed at or above the expected minimum proficiency level for numeracy and 83 percent of Year 6 students performed at or above the expected level.

10. **Dropouts pose a challenge at the secondary level.** While access to primary education is high across Tuvalu, secondary education net enrollment rates drop sharply. The decline has serious implications for human capital development and the flow of skilled graduates available to enter the labor market, take up key leadership positions and influence future directions for economic growth. Recent analytical work⁶ indicates that some students fail to attend schools because parents cannot afford the indirect financial requirements. To attend schools, students need school uniforms, school stationery, lunches, transport to and from schools, parent teacher association funds, field trips, sports gear, examination fees, and many other schools' activities that require additional outlays from parents. Quality of learning also has been identified as a possible cause of student dropouts, as students struggle to keep up with the pace of curriculum once they start to fall behind. Bullying/hazing in schools has been identified as a contributor to the high dropout rate at the secondary level but there remains little data on the prevalence of gendered school-based violence.
11. **Teacher education levels are improving, but continuous professional development presents challenges.** In 2019, there were 55 ECCE teachers for 676 students, 106 primary teachers for 1,687 students, and 46 secondary teachers for 683 students, resulting in very low pupil teacher ratios across all islands except Funafuti, with two islands recording less than ten primary pupils per teacher. Teachers in Tuvalu are categorized as either qualified⁷, certified⁸, or neither. According to the data from MEYS, all ECCE, primary and secondary teachers are categorized as qualified since 2016. While 86 percent of ECCE and primary teachers were certified in 2017, only 63 percent of secondary teachers were, meaning over a third of secondary teachers have no specialized post-secondary teacher training. Tuvaluan teachers currently receive pre-service teacher training overseas, predominantly in Fiji through the USP, with some receiving scholarships to study in other countries. However, they do not receive training on the Tuvaluan education system and curriculum upon returning to teach in Tuvalu. The Australian Support to Education in Tuvalu (ASET) Program is exploring development of an onboarding teacher training that is Tuvaluan-specific and reflects the Tuvaluan curriculum. The MEYS has intended to carry out annual continuous professional development (CPD)

⁵ The Education Quality and Assessment Programme (EQAP) housed within the Pacific Community (SPC) has worked with Government of Tuvalu to implement the Pacific Islands Literacy and Numeracy Assessment (PILNA). The PILNA was conducted in 2012, 2015 and 2018 to assess the learning achievement of pupils in school after 4 and 6 years of education. Overall the PILNA results show that student performance has improved from 2012 to 2018, with more students achieving in the higher proficiency levels (levels 7 and 8) for both literacy and numeracy. The proportion of students in lower proficiency level (levels 0 to 2) also decreases from 2012 to 2018 (PILNA 2018 Tuvalu Report, EQAP). In Tuvalu, Year 4 numeracy is tested in Tuvaluan, while Year 4 literacy and Year 6 numeracy and literacy are tested in English.

⁶ Realizing Education Access for the Pacific, DFID and TuEHCI 2017.

⁷ A qualified teacher in Tuvalu is identified as a teacher who has undertaken some training and/or post- secondary studies but not any specialized teacher training.

⁸ A certified teacher in Tuvalu is identified as a teacher who has undertaken specialized post-secondary teacher training and has met the course requirements, with or without other post-secondary qualifications.



for in-service teachers since 2014 when standards for teachers were introduced, but this has not happened regularly, and has not reached all teachers. Anecdotally, the Education Department also reports gaps in subject content knowledge of teachers in the country. “In-service training” is offered to a select number of teachers each year, with 20 relief teachers in 2017-2018 offered an opportunity to upgrade their qualifications through USP to fill gaps in the country’s teaching needs. MEYS is trying to improve quality of learning with a focus on teacher professional development and by developing a Teacher Professional Development Framework. Additional activities to improve pedagogy for teaching foundational skills are also being planned.

12. **School leaders need support to be effective in their roles.** The MEYS, with support from the Educational Quality and Assessment Programme (EQAP), a regional agency within the Pacific Community (SPC), has developed school leadership standards, indicators and an appraisal instrument, which is intended to inform development of CPD for school leaders. The appraisal instrument is still under review. The MEYS plans to develop a similar appraisal instrument for teachers. With the introduction of standards for school leaders in 2014, the government has tried to offer annual CPD for school leaders on topics identified to be most needed or lacking in classrooms and schools; however, trainings did not take place in 2018 or 2019 due to budget constraints. Effectiveness of these trainings is not known as evaluations and follow up did not take place. With infrequent boat schedules, long round trips, dependence on the weather to operate the vessels, and costly trainings, this presents unique challenges in scheduling and running CPD trainings.
13. **The Education Department lacks current operational policies in several areas essential to guide teaching and learning.** These include policies related to school-based management; textbook and learning materials; classroom assessment; inclusive education; instructional leadership; workforce planning; and teacher quality. As the Government continues to build the education evidence base, efforts are underway to document key policies and programs to have consistent guidelines available for all education stakeholders. The Education Department is also concerned about the lack of alignment of the curricula for Years 1-13 with the Tuvalu National Curriculum Policy Framework (TNCPF), as well as the mismatch between the curricula and resources available for learning. The Department carried out a review of the TNCPF and found practices and subjects taught in schools are not in line with the framework and entire subjects listed in the TNCPF are not taught in schools. One of the challenges for early grade reading is the lack of curriculum/syllabus or instructional materials for Years 1-3, especially in local language (*Gana Tuvalu*) given that it is not a written language. The dearth of readers, simple books and other early education resources limits the development of a reading culture. In addition, current teacher training (pre-service and in-service) does not adequately focus on the teaching and learning of basic reading skills in either Tuvaluan or English.
14. **Gender parity is in favor of girls, boys are not doing as well.** While gender parity is relatively even in ECCE and primary education, the percentage of boys in secondary education drops off significantly, with gender parity ranging between 1.27 and 1.55 between 2012 and 2017. Transition rate from primary to secondary education demonstrates the imbalance with 88 percent of females transitioning against 75 percent of males in 2019. Assessments also indicate gaps in learning outcomes with boys performing less well on standardized tests. Girls outperform boys in both PILNA and TJC and students in urban areas perform better than students in rural areas. While regional differences in scores were not statistically significant, the disparity between girls and boys demonstrated higher reading fluency and comprehension for girls across all sub-tests. The results also showed factors positively associated with better oral reading fluency such as pre-school attendance, reading at home, if a student enjoys reading, and classroom pedagogical practices such as new vocabulary, daily reading, and teaching unfamiliar words.



Social analyses have pointed to the impact of gender norms⁹ and expectations on girls' and boys' education, the lack of parental supervision and encouragement for boys to focus on their schoolwork and the poor quality of educational material to address gender biases and stereotypes. This has the potential to cause issues not only for the boys that are not reaching their full education potential or future employment prospects, but evidence from international studies suggest this can also lead to other social issues through the reinforcement and perpetuation of social expectations of males and females. Girls' achievement is not causing boys' underachievement and a disadvantage for boys in education does not translate into an overall advantage for girls in terms of gender equality with boys and men continuing to have increased resources, decision-making and privileges compared to girls and women. Further analysis would help to better understand the causes of the gender gap. Schools can play a key role in mitigating these risks with appropriate interventions directed at students, teachers and communities.

15. **Child Development and School Readiness.** According to the Tuvalu Early Human Capability Index (TuEHCI) 2016, 37.3 percent of children ages 3 to 5 in Tuvalu are stunted, comparable to rates of stunting in Sub-Saharan Africa. This has profound implications for the overall development of children, including in cognitive domains. Looking at all undernutrition indicators – stunting, underweight and wasting – males fare considerably worse than females in this age group. More analysis is required to better understand the causes of stunting in children and identify cost effective actions to address the issue in Tuvalu. Across all domains of child development measured by the TuEHCI, results were lowest for perseverance, pre-literacy and pre-numeracy, skills normally learned at preschool. It is positive to note that preschool enrolment did have a positive impact on these domains; however, the relationship between preschool enrolment and child development was not as high as would be expected. This could be attributed in part to the low quality of preschool instruction, low attendance rates picked up in the survey, as well as the effects of stunting on cognitive development. There is significant international evidence that shows that parent engagement is crucial to ensuring children are ready to start school. While the TuEHCI reported high levels of parent engagement, home stimulation levels were recorded as low to moderate. There is a need to increase the activities parents/caregivers do at home to stimulate children while improving attendance rates at ECCE centers.
16. **Teacher and Student Absenteeism.** Until 2020, teacher and student attendance were not monitored at the school level, nor reported to the central level, making it difficult to obtain information on teacher and student absenteeism. However, anecdotal evidence based on school visits and information from Education Department staff indicates attendance for both teachers and students is inadequate. Community sensitization about the importance of education, including gender sensitive and disability inclusive messaging, is critical for ensuring consistent student engagement and learning. Collecting teacher and student attendance should be mandated at the school level and monitored at the central level. From the start of the 2020 school year, the ASET Program is supporting the inclusion of a student attendance module in the Tuvalu Education Management Information System (TEMIS), although initial feedback indicates reason for absence is usually listed as 'unknown'. Data on students with special needs is not currently available, but their exclusion is suspected given the low enrollment in the center for children and young people with disability run by *Fusi Alofa* (16 clients in 2019, 4 girls and 12 boys¹⁰). Additional social and gender assessment surveys would help shed more light on the reasons for low attendance and potential solutions. Absenteeism reduces the number of hours available for student learning, as does the number of hours allocated to instruction time by the MEYS, which is considerably lower than many neighboring countries. Years 1 and 2 are allocated 3.5 hours per day, and Years 3 and 4 are allocated 4 hours per day, compared to most other Pacific

⁹ Gender norms are a society's expectations of the way that males and females should behave (think, feel and act).

¹⁰ Data is not age-disaggregated but currently the majority of clients at the centre are young adults not school age children, so it is possible that clients from previous years were also not all school-aged.



countries which allocate between 5 hours and 7 hours¹¹. Exacerbating this loss of instructional time are the school closures in Tuvalu due to extreme weather conditions, health issues such as the 2019 dengue outbreak and the 2020 COVID-19 response, extended celebrations, and extensive testing six times each term¹².

17. **Collection and use of education data for decision making.** The Government of Tuvalu is investing significant resources in its education system, with a strategic focus on early childhood education. In its efforts to get schooling “right” at the foundation levels, data collection, management and analysis is critical to improve the quality of the system. Tuvalu’s participation in regional learning assessments, education surveys and early grade assessments such as EGRA is commendable. TEMIS collects data through an annual school census and a statistical report is produced, albeit with some delay. This can in part be attributed to the difficulty in obtaining school census data from the outer islands due to poor communications channels (Ultra-High Frequency radios are largely relied on to transmit data), and infrequent boat schedules. Technical assistance is provided by DFAT, SPC and the EQAP. However, more real time data collection (supported by investments in improved connectivity) is required along with improved data analysis and forecasting. A feedback loop for assessment data, school performance and cost-benefit analysis of interventions would go a long way towards steering education policy and improving accountability of the sector. Providing schools with data on student performance, attendance and other data would shape how teachers and administrators focus efforts on teaching and learning. Having schools disseminate this data to parents and community members would improve school level accountability. Complementing quantitative data with qualitative data would provide more insight into gender and location disparities present in the quantitative data.

C. Relevance to Higher Level Objectives

18. **The proposed project (TuLEP – Tuvalu Learning Project) is aligned with several priorities identified in the World Bank Group’s Regional Partnership Framework (FY2017-FY23) (RPF) covering nine Pacific Island countries (Report No. 120479).**¹³ The project is aligned with focus areas of the RPF, specifically related to addressing education and skills gaps, gender inequality and gender-based violence and strengthening the education sector’s resilience to natural disasters and climate change. The RPF identifies expansion of the Pacific Early Age Readiness and Learning (PEARL) Program as an important vehicle with which to improve school readiness of children, teacher quality, and equitable learning opportunities. **The Tuvalu NSSD 2016-2020** includes Education and Human Resources as Goal 7, which aims to “provide high quality education to equip people with knowledge and skills they need to achieve a higher degree of self-reliance in a changing world.” **The TESP III (2016-2020)** focuses on three key outcome areas related to universal access to ECCE, primary and secondary education; improved quality and relevance of education through available teachers, infrastructure and learning resources; and improved sustainability through better governance, partnership, administration and financing of education services. The TESP III is aligned to the Pacific Regional Education Framework (PACREF) with its three goals of access and equity, quality, and efficiency and effectiveness. TESP III is similarly aligned to the Global UN Sustainable Development Goal 4 on Education which is “to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.” A new five-year plan for the education sector, TESP IV (2021-2026), will be developed during 2020/2021 with support from the Global Partnership for Education through the PACREF and the World Bank.

¹¹ ASET Program, Discussion Paper: Teaching English Literacy in the Classroom: Allocation of Time, 2019.

¹² Ibid.

¹³ Kiribati, the Republic of the Marshall Islands, Federated States of Micronesia, Republic of Nauru, Republic of Palau, Independent State of Samoa, Kingdom of Tonga, Tuvalu, and Vanuatu. World Bank January 2017.



19. **The project also responds to the recommendations detailed in the World Development Report (WDR) 2018¹⁴ to ensure that schools improve learning for all students, prioritize foundational skills in the early grades, assess learning and act on evidence, and align stakeholders to better manage education systems.** Building on the WDR 2018, the East Asia and Pacific regional report on education expands this framework to cover how institutions can be aligned to ensure learning; prioritize effective and equity-minded public spending; select and support teachers as a critical input for preparing students to be ready to learn; and systematic use of assessments to inform instruction.¹⁵ The project focuses on activities that promote learning including teacher training and coaching, more holistic support for children’s readiness for school and the use of measurement systems to inform policies as well as classroom instruction. To address the “learning poverty” and get all children reading by age 10, the project focuses on early literacy at the pre-school level and local language reading instruction at the primary level to make sure “children learn to read in order to be able to read to learn.”¹⁶
20. **The project incorporates design elements that will strengthen the country’s ability to respond to COVID-19 and future emergencies, including health-related as well as natural disasters.** In particular the interventions include setting up satellite internet connectivity in schools across the country to enable distance learning and communications, incorporating education technology into the school curriculum, and using public awareness campaigns and nurse visits to ECCE centers and schools to strengthen messaging around health issues such as good hygiene practices to battle disease. Internet connectivity in all schools will, in future, play a significant role in the preparedness of the Tuvalu education system, both to respond to natural disasters and health emergencies. The project also supports the establishment of a Central Project Management Office (CPMO) which can help implement operations responding to COVID-19. These design elements were already in place prior to the emergence of COVID-19, but the current crisis has led to some minor adjustments to the design, including placing a priority on establishing satellite connectivity and strengthening messaging around COVID-19 prevention to address the current emergency.

II. PROJECT DESCRIPTION

A. Project Development Objective

PDO Statement

To improve the readiness of children entering first grade and improve the reading skills of students¹⁷.

PDO Level Indicators

¹⁴ World Bank. 2018. *Learning to Realize Education’s Promise*. World Development Report. Washington, DC: World Bank.

¹⁵ World Bank. 2018. *Growing Smarter: Learning and Equitable Development in East Asia and Pacific*. World Bank East Asia and Pacific Regional Report. Washington, DC: World Bank.

¹⁶ World Bank. 2019. *Ending Learning Poverty: What will it take?*

¹⁷ While the primary focus of the project is on ECCE and primary school children, the project also includes interventions to support improved literacy and a strengthened reading culture for upper primary years and secondary schools given the small size of the sector (only two secondary schools in the country). In addition, the project will aim to strengthen the management of education services through capacity building for improved research, policy development and learning assessment implementation. Improved management will mean a system more resilient to shocks such as those from weather- and health-related natural disasters, enabling faster recovery to learning.



- Percentage of children aged 3-5 years in ECCE centers with a school readiness score above 0.7¹⁸ (disaggregated by gender)
- Percentage of students meeting the minimum reading fluency benchmark in Year 3¹⁹ (disaggregated by gender)
- Percentage of students meeting minimum literacy proficiency levels in Year 4²⁰ (disaggregated by gender)

B. Project Components

21. The project builds on the analytical work carried out under the recently closed PEARL Program (2014-2019), funded by the Global Partnership for Education and executed by the World Bank in Tuvalu and other countries in the Pacific. In Tuvalu, PEARL carried out surveys measuring school readiness and early literacy, and piloted interventions to provide the government with evidence of what works to improve school readiness and early grade reading skills of children in the country. Based on this evidence, the government developed a Tuvalu Early Education Roadmap 2019-2023 to scale up the successes of PEARL, and do more to strengthen children's early experiences, both in preparing them for formal schooling, and improving their reading skills through increased availability of instructional materials and improved teaching practices in the early grades of preschool and primary education.
22. The proposed project would scale up the PEARL activities across all ECCE centers and primary schools in Tuvalu (18 ECCE centers and 10 primary schools). School-based interventions would focus on ECCE and primary education. However, given the small size of the education sector and the urgency of building human capital across all beneficiaries, the TuLEP would include support beyond these grades and include some support at the upper primary and secondary grades. System-level strengthening, research and policy support would cover the entire education sector. Such system-wide activities would support assessments (e.g., TuEGRA, TuEHCI), policy reviews (e.g., curriculum, teacher policy), survey/research (e.g., stunting, time on task), teacher training (short term professional development) and school leadership strengthening. In addition, the proposed project will also support key actions related to improving school safety and resilience, and school health and nutrition. The project consists of four components: (i) strengthening early childhood care and education and school readiness for all children; (ii) improving literacy outcomes in all schools; (iii) research, learning assessment and policy review; and (iv) strengthening institutional capacity, monitoring and evaluation and education sector management.
23. **Component 1: Strengthening early childhood care and education and school readiness for all children (estimated costs: US\$1.8 million equivalent).** Component 1 aims to support ECCE centers and community engagement to improve school readiness of all children in Tuvalu through two sub-components. Further study on the scale and causes of stunting among young children (under Component 3) would also inform future messaging and targeted interventions under this project or those supported by other development partners.
24. **Sub-component 1.1: Strengthening the delivery of ECCE services.** This sub-component aims to improve the quality of ECCE services to children and strengthen the capacity of preschool teachers to deliver quality ECCE services and facilitate playgroups with children and their caregivers through improved training and resources. To achieve this, the project will: (a) provide training to ECCE teachers on implementing the new ECCE curriculum and playgroup

¹⁸ School readiness is measured as the overall development score on cognitive and non-cognitive dimensions on a scale of 0 to 1 in the TuEHCI assessment.

¹⁹ Minimum reading fluency benchmark is defined as 50 correct words per minute (CWPM) as measured for Year 3 students in the TuEGRA assessment.

²⁰ Measured as the percentage of Year 4 students reaching or exceeding minimum proficiency (Level 4) in literacy in the PILNA assessment.



methodology (play-based learning with caregivers and young children) with ongoing mentoring support through lesson observations, and training in gender, GBV, child protection and disability inclusion; (b) support weekly playgroups at all 18 ECCE centers across the country (Playgroups@preschools activity piloted under the PEARL Program); (c) provide pre-school learning materials, activity guides and resources and playgroup kits to the centers annually; (d) develop and provide age-appropriate reading resources to ECCE centers (in local language), including training for teachers on writing and illustrating books themselves; and (e) support regular nurse visits to ECCE centers to carry out child health and hygiene monitoring²¹ and discussions with parents²², including costs of travel to centers, printing of resources and other related operational costs. Materials and resources provided to ECCE centers would be developed for community sharing so that parents and caregivers could have access to materials, etc. to engage with their children at home.

25. **Sub-component 1.2: Conduct public awareness program and community outreach.** This sub-component aims to raise the understanding of parents, caregivers, churches and community leaders on the importance of early childhood stimulation, preschool participation, nutrition and health for school readiness, and build awareness/knowledge on climate health impacts. The outreach campaigns would include surveys and feedback from communities on the quality of programming, challenges with attendance and barriers to access including differences relating to gender and disability, and this feedback will be used to adjust project implementation as needed. In addition to focus groups, radio, community and church meetings, the project would support child protection and positive behavior management strategies as well as messaging for inclusive education and disability screening. The awareness program would also support a “Read with your Child” campaign to encourage community support for a culture of reading. This subcomponent will also support implementing recommendations and activities identified by the health assessments conducted under Component 3.2(a) of the Project, all selected in accordance with the criteria and procedures detailed in the Process and Procedures Manual.
26. **Component 2: Improving literacy outcomes in all schools (estimated costs: US\$4.1 million equivalent).** Component 2 will support local language literacy in the early grades (Years 1-3) to improve reading, understanding and writing skills. Additional literacy activities in local language and English would also be implemented for the higher grades. This component will also support technology-enabled learning materials, teacher training and literacy enrichment activities to strengthen literacy beyond the early grades.
27. **Sub-component 2.1: Implementation of the Tuvalu Reading Program (TRP).** The project will: (a) develop and produce additional learning materials for Year 1 local language reading lessons in addition to those already developed under the PEARL Program and a full complement of Year 2 and Year 3 TRP local language materials; (b) piloting lessons and materials and revising materials as required; (c) providing schools with materials developed; (d) train teachers and coaches on the TRP for Years 1-3; and (e) coaching and mentoring teachers to support their implementation of the Tuvalu Reading Program. Activities will include: (i) development and provision of teacher guides which detail the methodology for explicit instruction (scripted lessons), student workbooks, additional resources to enhance children’s opportunities to learn to read, basic instructional materials and equipment to all schools²³; (ii) in-service training for all teachers and school principals, head teachers and assistant head teachers in

²¹ The project could include screening for hearing and vision impairment in ECCE centers.

²² Nurses could provide teachers and parents with information on the Family Protection and Domestic Violence Act 2014 (FPDVA) and child protection legislation and policies (when finalized) during these visits.

²³ Materials would include local language readers for students to take home. Equipment would include easel boards, laminating machines and stationery.



the TRP approach for Years 1-3. Teachers will receive training twice a year and head teachers once a year; and (iii) coaching and mentoring of all teachers implementing the TRP, on a termly basis.

28. **Sub-component 2.2: Strengthening literacy in all schools through teaching and learning innovations and enrichment activities.** This sub-component will encourage school-based enrichment efforts to promote literacy for all, with a focus on reducing gender disparities and encourage regular attendance with school-based activities. It will also provide educational technology innovations to support teachers and students. The technology activities aim to increase digital content and distance learning, both critical to addressing the COVID-19 emergency and other crises that lead to school closures, to give students opportunities to learn even when schools are closed. At the school and teacher level, this includes: (a) aligning e-learning resources and e-learning library to the curriculum and context; (b) facilitating distance professional development and training of teachers in the outer islands; and (c) resourcing Information and Communications Technology (ICT) Centers for schools. At the student level, this will include: (d) an e-reader pilot to expand the number of reading materials available to students in upper primary and secondary; and (e) additional learning enrichment activities including digital literacy, computer classes, digitized gamification of literacy concepts, phonics for emergent readers (P4ER) to support struggling students in higher grades, educational videos, and school clubs/sports. The sub-component would also support: (f) training and engagement of teachers in the use of digitized resources and education technology interventions being introduced; and (g) installation and maintenance of satellite internet connectivity equipment and ongoing internet costs for schools through the duration of the Project. School leadership training, school-wide coaching and increased monitoring of outer islands would also be supported to take advantage of the improved connectivity to schools through ICT Centers and internet connectivity. In addition, (h) this sub-component will support implementing recommendations and activities identified through the studies conducted under Component 3.1 of the Project, all selected in accordance with the criteria and procedures detailed in the Process and Procedures Manual.
29. **Component 3: Research, learning assessment and policy review (estimated costs: US\$3.6 million equivalent).** This component will provide resources to strengthen the evidence base of what works in improving learning in Tuvalu through three sub-components.
30. **Sub-component 3.1: Strategic research, surveys and analysis.** The project will make efforts to fill knowledge gaps and inform the Government's education policies through: (a) a study on teacher and student absenteeism; (b) a gender analysis of enrolment and retention to understand why boys are dropping out of school in greater numbers than girls, and why boys are underperforming compared to girls, to inform government decisions, including the development of recommendations for improving education outcomes for boys, some of which could be supported by the project (under sub-component 2.2); (c) a workforce planning exercise to inform improved management of the MEYS staff; (d) a time-on-task study to identify teaching and learning efficiency in the classroom; and (e) disseminating results and key messages derived from these activities. The project will fund the technical assistance (TA) required for activities under this sub-component, workshop and travel costs required for collection of data and information, and costs of dissemination of results and key messages. Additional activities recommended from the studies could be supported under sub-component 2.2.
31. **Sub-component 3.2: Strengthening the education policy framework.** The project will support activities to: (a) develop recommendations to improve health and nutrition of preschool- and school-aged children, incorporating findings from the 2019 Multiple Indicator Cluster Survey (MICS) carried out by the United Nations Children's Fund (UNICEF) on likely contributors to stunting and undernutrition in Tuvalu, and where possible provide support towards implementation of select recommendations (under Component 1.2); (b) carry out a curriculum review and



develop comprehensive Goals and Objectives for curricula from Years 1-13 to inform the government's plans for an overhaul of the primary and secondary schooling curricula, which will include a review of the length of the school day; (c) provide technical assistance to review and strengthen the existing school leader and teacher quality²⁴ framework through improvements in pre-service and in-service training, and school leader and teacher appraisals; (d) support implementation of recommendations outlined in the disability and inclusive education plan being developed with support from the ASET Program, selected in accordance with the criteria and procedures detailed in the Process and Procedures Manual; (e) share TEMIS data with schools and communities through school overview reports; and (f) host the National Conference of the Child (2021 and 2024), to consider evidence and priorities for ECCE strengthening and multisectoral collaboration (particularly across ministries of education, health and local government), and provide a forum to learn from TESP III and inform the development of TESP IV.

32. **Sub-component 3.3: Measurements of school readiness and student learning.** The project will support: (a) two iterations of the TuEHCI to provide the government with data to monitor progress on its efforts to improve school readiness outcomes, and to determine the effectiveness of project interventions carried out under Component 1; and (b) three iterations of the TuEGRA to monitor children's reading development in the early grades,²⁵ and determine the effectiveness of project interventions carried out under Component 2. Support for these surveys under the project will include: (i) TA to develop/adjust the instruments, pilot, clean and analyze data, and produce reports and other dissemination materials; (ii) training enumerators to carry out the surveys; and (iii) data collection costs, including supervisor and enumerator travel. The project would further support the review and adaptation of lesson observation tools - Measuring Early Learning Environments (MELE) and TEACH - for the Tuvaluan context to guide teacher coaching and mentoring at the ECCE and lower primary levels and provide feedback to teachers.
33. **Component 4: Strengthening institutional capacity, monitoring and evaluation and education sector management (estimated costs: US\$4.5 million equivalent).** This component will provide overall support to the other three components and help ensure the activities are sustainable beyond the life of the project, including monitoring and evaluation (M&E), training, management, and operations related to project activities. In addition, the component will finance the establishment and operation of the CPMO to oversee and support the coordination, preparation and implementation of all World Bank-financed and co-financed projects in Tuvalu, including TuLEP.
34. **Sub-component 4.1: Project management support (estimated costs: US\$1.5 million equivalent).** This sub-component will provide technical and operational assistance to the MEYS on the management, implementation, monitoring and evaluation of the Project. This will include funding a TuLEP Project Coordinator, Deputy Coordinator, project accountant, procurement officer, and M&E activities conducted at headquarters, island and community levels, as well as operational costs. The project could support an evaluation of project interventions on learning outcomes.
35. **Sub-component 4.2: Central Project Management Office (estimated costs: US\$3 million equivalent).** This sub-component will support the establishment and operation of a CPMO within the Ministry of Finance (MOF) to strengthen the capacity of the Government of Tuvalu to provide implementation support to this Project and other World Bank-financed or co-financed operations, including activation of emergency funding to respond to the COVID-19 pandemic. The CPMO will comprise international and national staff in project management, procurement,

²⁴ This could include a review of the materials and courses offered by pre-service teacher training and ensure alignment with in-service modules on teaching reading in early grades.

²⁵ Continued support from EQAP and USP to carry out national assessments would be envisaged. The project would help formalize ongoing technical engagement from these regional institutions.



financial management, safeguards and monitoring & evaluation. Activities to be financed will include: (a) operating costs of the CPMO including remuneration of national and international personnel; (b) training and workshops for capacity building activities to be delivered by the CPMO; (c) small goods and equipment for functioning of the CPMO office; (d) financial audits; and (e) monitoring and evaluation. Technical specialists and coordinators needed by other projects will be financed separately by those projects.

36. **Gender.** The project will respond to gender inequality and GBV through several approaches. A social/gender assessment was conducted to help determine the design of project interventions to address gender issues and inclusion, particularly with respect to boys' underperformance, school gender-based violence, and to identify opportunities for disability inclusion. Activities will include regular teacher and parent sensitization on child well-being, nutrition, child protection and inclusive education; teacher training modules; and further gender analysis. Table 1 maps the quality challenge, potential actions and indicators that will be used to measure how the project achieves results towards closing the gender gap. The project aims to support the Government to implement their policy commitments relating to gender, GBV and inclusion and engage with the Department of Gender under the Ministry of Health, Social Welfare and Gender Affairs (MOHSWGA) as the lead agency with responsibility on gender. In addition, the training and community outreach program will be monitored through a M&E framework being developed by the Education Department (Research, Statistics and M&E unit). Activities to address fundamental issues around gender, child protection and school safety are outlined in Annex 2.
37. **Gender Gap.** Girls outperform boys in all available student assessments, i.e., PILNA, EGRA and TJC. While regional differences in scores were not statistically significant, the disparity between girls and boys demonstrated higher reading fluency and comprehension for girls across all sub-tests. The 2016 EGRA which is being used as a baseline for the reading fluency indicator, demonstrated that 48.4 percent of girls in Year 3 achieved the minimum fluency benchmark of 50 correct words per minute as compared to only 28.1 percent of Year 3 boys. There is a 20.3 percentage point gender gap in minimum reading fluency. The acquisition of reading skills varies by the complexity of language and the social context of learning which might differ for boys and girls. Zero scores, or the percentage of students who cannot read a single word correctly, is logically equivalent across genders, and thus provides a simple and comparable measure. The percentage of zero scores in reading fluency is 13.66 percent, but this masks large gender disparities. The percentage of male zero scorers in the reading fluency assessment in Year 3 is 21.6 percent compared to only 6.3 percent of female zero scorers, which represents a gender gap of 15.3 percentage points. A gender analysis of the causes of boys' underperformance in school will be conducted to inform government decisions and project interventions, and to improve educational outcomes for boys. These causes are likely to include how gender norm stereotypes, socialization, and expectations in school and the community²⁶ reinforce perceptions by teachers regarding the abilities of boys and girls, the structure of classroom dynamics, and how cultural and religious notions of masculinity influence attitudes of boys and parents regarding boys' education. The earlier boys' success in literacy is addressed through interventions that change expectations of teachers and parents, the better. Addressing gender inequality in education will contribute to transforming gender inequality within families, communities and society.
- a) **Action.** An analysis of gender stereotyping and skewed gender perceptions in teacher behavior will be conducted. The project will make use of the lesson observation tool to assess active engagement of boys and girls, language, classroom resources and teaching approaches that reinforce gender stereotypes. Interventions will be designed, based on the analysis, to address boys' underperformance, such as teacher

²⁶ *Boys Underachievement in Education, A review of the Literature.* August 2016. Prepared by RTI with funding from USAID. http://www.ungei.org/Boys_Underachievement.pdf



training; improved school materials; use of technology to enrich curriculum; and P4ER support for low performing students. Some of the interventions could be supported by the project, including: (i) effective parenting programs; (ii) increasing the availability and range of reading materials to foster an interest in reading and learning for all children; and (iii) provide recommendations to curricula revisions that include topics, activities and teaching modalities intended to appeal to a wider array of student interests (strategies that engage different learning modalities)²⁷. The increased participation and engagement of boys would be expected from gender responsive solutions involving both parents and schools, more varied school learning approaches, opportunities for boys and girls to find non-academic success (e.g., music, sports), and the use of computer assisted learning.

- b) **Indicator.** Reduction in the “Gender gap in percentage of Year 3 students with zero scores in reading fluency”. It is expected that project interventions will lead to a reduction in zero scorers in general and a reduction in the gender gap of five percentage points to 10.3 percent over five years.

Table 1. Closing the Gender Gap

Gap	Action	Indicators
Weaker performance of boys in school at primary and secondary levels	Teacher training; improved school materials; use of technology to enrich curriculum; literacy enrichment activities to increase school attendance and student engagement; P4ER for low performing students	Reduction in gender gap in percentage of Year 3 students with zero scores in reading fluency; improved performance of boys in TuEGRA or national tests

- 38. **Inclusive education.** Currently centralised data is not available on the enrolment, attendance and achievement of students with disability in Tuvalu. It is reported that some children with disability attend government-run public primary schools in Funafuti and in outer islands.²⁸ Globally children with disability are less likely to start school and make up a major group of out-of-school children. Girls with disability face disproportionate barriers to access education.²⁹ Teachers needs to be trained to be able to identify students with disability and respond to their specific learning needs. There is also a need to include the importance of educating girls and boys with disability in awareness and outreach with parents of children with disability. Activities are further outlined in Annex 2.
- 39. **Citizen engagement.** The project recognizes the important role that participation and engagement with community members who are involved in raising children plays in improving project activities and enhancing their contribution to achieving the targeted development outcomes by supporting children’s education in school and at home and improving school readiness outcomes through stimulation, literacy efforts and good nutrition. Engaging community members in the design and development of resources for caregivers and ECCE teachers will be an integral part of the project to ensure any material developed is properly adapted to the local context. This engagement will be organized in a way that ensures participation of mothers, fathers, caregivers, teachers, children, and other relevant stakeholders. Citizen engagement will be monitored through an intermediate results indicator under Component 1 that measures a feedback mechanism for continuous improvement of the public awareness and “Read with your Child” campaign under sub-component 1.2. Specifically, the project will be seeking feedback from caregivers on: (a) the informational content (e.g., are there any topics that caregivers would like to learn more/less about); (b) the adequacy of the delivery format; and (c) overall satisfaction with the services provided. The aggregate feedback will be reviewed by the implementing agencies on a regular basis and feed into an iterative process to improve the

²⁷ Ibid.

²⁸ Tavola, H., 2018. *Tuvalu Study on People with Disability*. Pacific Women: Suva, Fiji.

²⁹ World Bank, 2018b. *How Are Tuvalu’s Children Developing? Evidence-based policy recommendations for better early childhood development of Tuvaluan children*. Washington, DC: World Bank.



intervention design. This will be reflected in an intermediate results indicator that measures the share of parents/caregivers that found information disseminated through the ECCE public awareness program to be useful. In addition, enhancing the ability of MEYS to generate system-level annual reports on key performance indicators as well as school overview reports will also strengthen citizen engagement by ensuring that parents and communities have access to the information necessary to monitor the performance of school leaders, school managers and teachers in their communities. This will be measured by an intermediate results indicator under Component 3 on public dissemination of school overview reports.

- 40. **Climate.** A school infrastructure assessment, initiated as a Bank-executed activity with support from the WB Pacific Disaster Risk Management team and the Global Facility for Disaster Reduction and Recovery (GFDRR), will be conducted in parallel with the project to identify the vulnerability of schools to natural hazards and climate change and identify contributing factors of risk in order to inform the development of a strategic plan to enhance school building safety. The risk assessment will assess the institutional and policy environment and regulatory framework within which school infrastructure is planned, designed, constructed, operated, maintained, repaired and retrofitted, and make recommendations for institutional and policy actions necessary for planning effective implementation of safer schools, improving the enforcement of building codes, as well as building institutional capacity for risk reduction. If any recommendations come out of this work in terms of curriculum or policy, for example, inclusion of natural hazard awareness messages in learning material, then they may be incorporated into the work undertaken by the Project. The Project may also support key actions related to improving school safety and resilience such as inclusive evacuation procedures aligned with the results of the ongoing Development Policy Operation (First Resilience Policy Operation with a Catastrophe-Deferred Drawdown Option, P170558).

Project Financing

Table 2. Project Financing (US\$, AUD, SDR)

Component	IDA Grant Financing in US\$	IDA Grant Financing in AUD
Component 1: Strengthening early childhood care and education and school readiness for all children	1,800,000	2,670,000
Component 2: Improving literacy outcomes in all schools	4,100,000	6,080,000
Component 3: Research, learning assessment and policy review	3,600,000	5,340,000
Component 4: Strengthening institutional capacity, monitoring and evaluation and education sector management	4,500,000	6,660,000
Total:	14,000,000	20,750,000

Note: AUD is the currency used in Tuvalu.

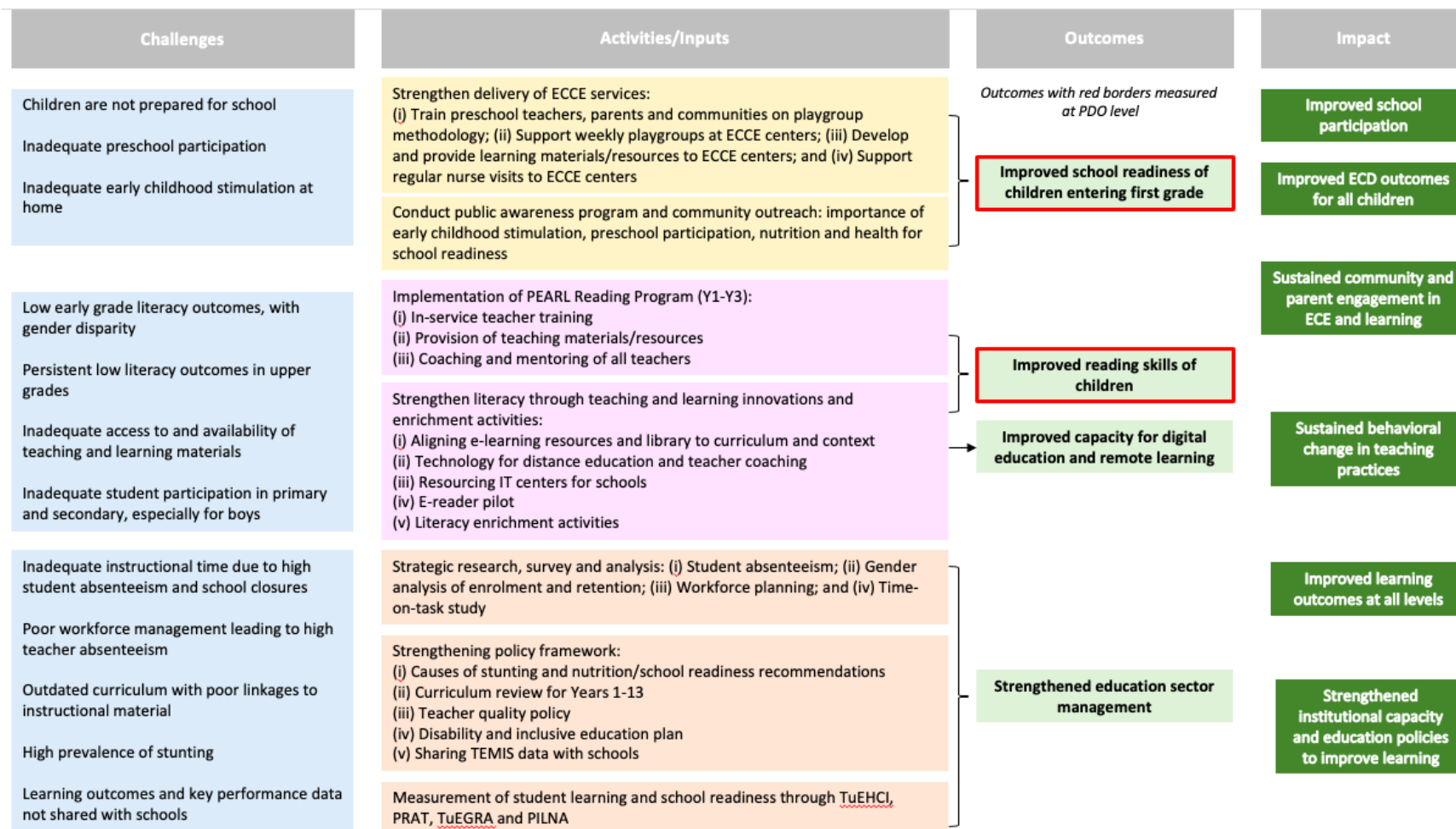
C. Project Beneficiaries

- 41. The project’s main beneficiaries are the children of Tuvalu enrolled in ECCE centers, primary and secondary school through the duration of the project (estimated at 4,200 students including new entrants to the system each year). Other beneficiaries include parents, primary caregivers and community members (estimated at 6,124) through the community awareness campaign. The project will also support all teachers (estimated at 200) and Education Department staff (estimated at 20) through training and capacity building activities.

D. Results Chain

- 42. Figure 1 depicts the Theory of Change for the project and illustrates how the proposed interventions address key challenges in the sector and how they work towards achieving the PDO.

Figure 1. TuLEP Theory of Change





E. Rationale for Bank Involvement and Role of Partners

43. **Rationale for Bank involvement.** Although the proposed project would be the first IDA grant in the education sector in Tuvalu, the World Bank has had an active and constructive engagement in the sector since 2014. The focus of TuLEP has been influenced by the significant analytical work carried out under the PEARL Program from 2014-2019. The PEARL developed and tested the impacts of a reading program for year 1 students. Based on these positive results, the government developed a Tuvalu Early Education Roadmap 2019-2023 to scale up the literacy program and expand into pre-school based on the successes of the PEARL in Tuvalu as well as other Pacific Islands. The resources available under IDA18 combined with the Bank's leadership in addressing learning poverty in the region and beyond make the Bank a reliable long-term partner. Additional funding from DFAT through the Pacific Regional Program for Education further supports the Bank's efforts to develop education initiatives in the region that allow the Bank to innovate, adapt and apply findings on the most effective and efficient ways to improve education outcomes. The value added of the World Bank's support comes from the global expertise that can be mobilized, capacity for project management available from the ongoing Bank portfolio in Tuvalu, and the experience with the PEARL framework, particularly the technical networks established with regional agencies.
44. **Role of Partners.** Given the small size of the country and limited number of development partners, coordination is handled on an ad hoc activity basis, but is well managed by the Education Department. While Australia and New Zealand provide significant technical assistance and financing for education, UNICEF is also scaling up their support through regional mechanisms and the launch of their new country strategy, which includes activities such as: (i) ECCE sub-sector review and curriculum implementation planning (2020); (ii) regional review of ECCE curricula and school readiness assessment for the Pacific (2020); (iii) development of ECCE quality standards (2021); (iv) development of in-service training modules and plan in line with the Pacific ECCE Teacher Competency Framework and new national curricula (2020); (v) regional review of inclusive education policies and programs (2020); and (vi) technical support to the 2020 Conference of the Child. Australian DFAT technical assistance support focuses on three key areas: (i) improved student learning through literacy and numeracy in English language during years 1-4 of primary school; (ii) establishment of a functional, accessible and quality vocational training pathway in education; and (iii) strengthening the Education Department to deliver equitable, professional and inclusive services by improving their internal management and decision-making practices. The New Zealand Teachers Exchange Program and Fiji Retired Teacher Exchange Program help provide additional capacity to fill gaps by teachers on leave. The USP provides pre-service teacher training and teacher qualification upgrading, which the project will work with to strengthen collaboration. The EQAP works with the MEYS on improving the education policy framework, improving school leader and teacher competencies, and developing the PILNA, carrying out data collection and analyzing results. EQAP also worked with MEYS on the 2016 EGRA. TuLEP will continue to collaborate with EQAP on these activities. TuLEP will emphasize strengthening the support to MEYS from regional partners such as the USP and EQAP, drawing on them for technical assistance where possible with the aim of improving sustainability of activities in an environment of thin capacity.

F. Lessons Learned and Reflected in the Project Design

45. **PEARL lessons:** Evidence from the PEARL activities in Tonga showed that community-led playgroups increased school readiness for disadvantaged children by increasing pre-literacy and pre-numeracy outcomes by 24 percent of what a child normally gains in a year. The early grade reading intervention helped increase the percentage of students able to read with comprehension by 11 percent. In Kiribati, grade 1 students showed large improvements in core reading skills after one year of the school readiness intervention. Evidence from the PEARL activities in Tonga



showed that both the school readiness intervention, Community Play-Based Activities (CPBAs), and the early grade reading instruction intervention, Come Let's Read and Write (CLRW), improved later reading outcomes in a cost-effective manner. The combined effect, i.e. children living in communities with community play based activities and attending early reading instruction, showed the greatest improvements in later primary school reading skills. The measure used to evaluate the effectiveness of the CPBAs was the Tongan Early Human Capability Index and the measure used to evaluate both the longer-term outcomes of the CPBAs and the immediate impacts of the CLRW program was the Tongan Early Grade Reading Assessment. Importantly, both instruments were sensitive enough to pick up change in child outcomes as a result of the interventions. With these similar interventions and similar measurement tools, there is no reason to doubt that these similar interventions would be impactful and that the instruments would be effective for ongoing monitoring and evaluation in Tuvalu.

46. **Building on ongoing interventions in East Asia that have focused on early childhood development, the use of teacher coaching, structured pedagogy, targeted local language instruction, and opportunities for digital education**, the project proposes scaling some of these successful and cost-effective interventions. The project has also incorporated lessons from India, Kenya, South Africa, and other countries where teacher training and focused literacy interventions have been effective. The project will explore digitized options to collect data, digitize learning materials, expand access to classroom enrichment, provide messaging to teachers especially those based in the outer islands, and strengthen feedback mechanisms for education stakeholders.
47. **With a population of roughly 11,000 people, Tuvalu is characterized as an extremely thin capacity environment.** Attracting and retaining qualified expertise (international or national experts) particularly in areas outside the routine functions of government, such as technical experts, procurement and safeguards, has caused significant delays in WB financed projects in Tuvalu. It is not uncommon for recruitment of individual consultant Project Managers/Coordinators to take more than twelve months after project effectiveness. Establishment of the CPMO, including exploring options for engaging a firm to manage recruitment, deployment and supervision of international expertise, is intended to mitigate these risks in the medium term. Engagement of an internationally qualified Project Coordinator for the TuLEP is intended to supplement the capacity of MEYS for implementing the Project in the short term. The limited private sector in Tuvalu means that most goods, other than consumables, must also be obtained from the international market. Implementing agencies often have small capital budgets and lack experience with purchasing from the international market. This means that procurement planning and contract management needs to allow for longer than expected lead times; pay sufficient attention to managing the risks of remote contracting; and devote sufficient resources to market survey and building relationships with remote suppliers.
48. **Intensified support is required to address significant capacity limitations.** Experience with all previous World Bank-financed projects in Tuvalu shows that intensive implementation support is required throughout the life of the project. In addition to implementation support missions, the World Bank team will provide remote support and include monthly video-connection meetings with the MEYS and CPMO as needed.

III. IMPLEMENTATION ARRANGEMENTS

A. Institutional and Implementation Arrangements

49. The Education Department within MEYS will be the implementing agency (IA) for components 1, 2, 3 and 4.1 of the Project. Component 4.2 will be implemented by the MOF.



50. A Project Coordinator and Deputy Project Coordinator within the Education Department will be responsible for the day-to-day coordination of the implementation of components 1, 2, 3 and 4.1. These positions will be recruited within three months of the effective date of the financing agreement. Oversight of components 1, 2, 3 and 4.1 will be provided by the Project Steering Committee comprising representatives from MOF, MEYS, MOHSWGA, and Ministry of Local Government and Agriculture (MLGA), and a representative from a local government island council (Kaupule). The Project Steering Committee will be established within three months of the effective date of the Financing Agreement.
51. The Government of Tuvalu will establish, by no later than three months after the effective date of the Financing Agreement, the **Central Project Management Office** to sit within the MOF. The CPMO will be comprised of international and national staff in project management, procurement, financial management, safeguards and monitoring & evaluation. The CPMO will oversee and provide hands-on support in the coordination, preparation and implementation of World Bank financed development projects in Tuvalu. The CPMO will also provide capacity building for the government ministries implementing World Bank-funded projects. The CPMO will work closely with the Project Coordinator within the IA and the Central Procurement Unit (CPU). A procurement advisor will be recruited to the CPMO within three months of the effective date of the Financing Agreement. Oversight of the CPMO (Component 4.2) will be provided by the existing National Project Steering Committee. For TuLEP, the CPMO will provide procurement, financial management, environmental and social, and monitoring and evaluation support.
52. A **Processes and Procedures Manual** will be prepared and adopted by the Education Department within three months of the effective date of the Financing Agreement to support project implementation of components 1, 2, 3 and 4.1. The draft manual shall be finalized no later than three months after project effectiveness and will incorporate institutional arrangements for day-to-day execution of the project.
53. To support project implementation of component 4.2, **Standard Operating Procedures** (SOPs) for the CPMO will be prepared and adopted by the MOF. The SOPs shall be prepared no later than three months after project effectiveness and will include institutional arrangements for day to day operation of the CPMO as well as processes for execution of all new World Bank financed projects in Tuvalu.
54. An annual work plan and budget will be submitted for WB review by August 30 each year the project is active. Progress reports will be submitted twice a year (45 days after end of each semester) to inform supervision missions. A mid-term review will be conducted no later than three years after the effective date of the Financing Agreement.

B. Results Monitoring and Evaluation Arrangements

55. Results monitoring will be led by the Research, Statistics and M&E unit in MEYS. The unit is supported by technical assistance from DFAT (through ASET) and will consist of one M&E Education Officer and one full time Technical Assistant. The M&E TA will have responsibility for oversight and coordination of M&E and research. He/she would coordinate M&E activities supported by TA under Components 1-3 including ECCE consultants, TRP consultants, research officers, assessment specialists and ICT specialists, and would be responsible for reporting on the results framework. In addition, they will be responsible for capacity building of any MEYS M&E officers that may be recruited during the project period. The unit will be guided by the proposed TuLEP results framework, which articulates the PDO and intermediate results indicators that were agreed upon by MEYS and the World Bank and will include targets that represent reasonable development milestones to be achieved under the project.



56. DFAT is supporting the strengthening of the Tuvalu Education Management Information Systems (TEMIS) including digitized data collection and reporting. The Ministry is working on digitized reporting through the Ministry website (meys.gov.tv) with technical support from SPC. The proposed project will further support the analysis and dissemination of data collected through TEMIS at the central and school level by generating automated system-level annual reports on key performance indicators as well as school overview reports. Measures to safeguard student and teacher level data will be incorporated by having all personal identifiers encrypted before they are uploaded on a digital platform. Where not already established, data security and handling procedures will be introduced to eliminate the risks associated with identification of individuals.
57. National examination data is collected by MEYS. The proposed project will further support the measurement and analysis of learning outcomes at three levels – school readiness at pre-primary through TuEHCI, literacy proficiency of students in Years 1 to 3 through TuEGRA, and numeracy and literacy proficiency of students in Years 4 and 6 through PILNA. These will inform reporting on three PDO level indicators. The project will support the measurement of effective teaching practices through lesson observation using tools developed under PEARL for primary education. For pre-primary education, the World Bank TEACH-ECE tool (with some of the MELE constructs) will be adapted to the Tuvaluan context. It collects data on time-on-task, classroom culture, guided learning and socioemotional skills. This data will be collected by Head Teachers and will inform teacher coaching and mentoring and provide enhanced accountability for the ECCE and TRP interventions. Lesson observation and instructional leadership by head teachers will also be supported through the school leadership training program. Head Teachers will also be trained on collecting and reporting data on student and teacher attendance.
58. The project supports a substantial research and learning agenda. Research areas include nutrition and health, gender disparities in school participation, completion and learning outcomes, time-on-task, workforce planning and teacher quality. Outputs from this research will inform policy review to support improved learning in Tuvalu. In addition, the project will support the development of the Tuvalu Education Sector Plan 2021-2025. Finally, the World Bank will conduct two supervision missions per year to monitor project implementation and performance.

C. Sustainability

59. The design of the project ensures system-wide reforms and behavioral changes in teachers and support structures that are likely to persist beyond the project timeline since they entail modification and adaptation of existing processes and roles. These include (a) strengthening community engagement in pre-schools through regular playgroups and partnerships with the ECCE centers; (b) training of teachers in targeted instruction and structured pedagogy; (c) increasing stock and availability of local language teaching and learning materials; (d) increasing inclusiveness in education by addressing gender gaps; (e) increasing the use of evidence based data for decision making through the implementation of School Overview Reports and the dialogue they encourage between the school and community; and (f) policy reform to improve curriculum, workforce planning and teacher quality.
60. Sustaining the development and use of provided inputs such as local language teaching and learning materials or technical assistance will remain a challenge in a small island economy like Tuvalu. However, these one-time inputs to support the roll out of the early grade reading curriculum and the introduction of structured pedagogy will provide a strong foundation for improved learning and provide the MEYS with robust evidence to support these interventions after the project if there are positive impacts on learning. Administrative capacity gains will be sustained by working through existing Government systems where possible while financial sustainability would be more incremental as annual budgets begin to capture the TuLEP programs. The introduction of digital mechanisms



to collect and manage data, train teachers, and educate parents would provide an initial investment and some recurrent costs, but are likely to be more efficient and less costly than current island visit arrangements.

61. The creation of a CPMO for supporting the preparation, coordination and implementation of all Bank-funded projects in Tuvalu will help to institutionalize the skills and human resources to strengthen project management, procurement, financial management, environmental and social safeguards and coordinated monitoring and evaluation across the whole of government.

IV. PROJECT APPRAISAL SUMMARY

A. Technical, Economic and Financial Analysis

Technical

62. **Tuvalu's returns to schooling is at 13.4 percent**, considerably higher than the global average of 9.7 percent or the average for East Asia Pacific of 9.4 percent.³⁰ This implies that for every additional year of schooling, the increase in earnings for an individual is 13.4 percent. Private returns to education are highest at the primary level and become smaller (although still large) at the secondary and tertiary levels of education; and social returns to education exceed private returns. This creates a strong argument for investments in the early years of education.
63. **The proposed project design reflects evidence on key lessons learned in what works to improve learning**, including focus on ECE, local language instruction in the early years, community engagement in improving learning and child development, structured pedagogy, and teacher training strengthened by ongoing coaching and mentoring. Evidence from the MICS and PISA shows that ECE program attendance not only prepares children for primary school but also impacts education outcomes in later years.^{31,32} Quality ECE programs are supported by availability of age-appropriate reading materials. This problem is exacerbated in countries like Tuvalu where with a small population, there are insufficient authors and publishers working in the local language. Another problem is the insufficient or inappropriate use of book procurement and distribution systems, which increases the costs of provision. In Tuvalu, large distances between the outer islands and the associated difficulties with accessing them lead to increased transportation costs of reading materials.
64. **Instruction in the local language is important as children gain reading proficiency in the early years.** Students learn better and are less likely to drop out if they are taught to read in a language they speak at home. Data from Trends in International Mathematics and Science Study (TIMSS)³³ have shown that effects appear to persist over a lifetime, with higher average earnings accruing to students who began their schooling in their home language. Using the home language to instruct students for the early years of schooling is an important factor to establish not only reading competency, but also to provide the foundation to study more complex topics.

³⁰ Montenegro, Claudio E., and Harry Anthony Patrinos. 2014. *Comparable Estimates of Returns to Schooling Around the World*. Washington, DC: World Bank.

³¹ UNICEF. 2019. *A World Ready to Learn: Prioritizing Quality Early Childhood Education*. New York: UNICEF.

³² World Bank. 2018. *Growing Smarter: Learning and Equitable Development in East Asia and Pacific*. World Bank East Asia and Pacific Regional Report. Washington, DC: World Bank.

³³ World Bank. 2019. *Ending Learning Poverty: What will it take?*



65. **Interventions that target family and community support are effective in influencing a child’s readiness to learn and are often low cost.** For instance, in Zanzibar, children gather in a community space to listen to a preschool program (including song, stories and physical activities) delivered by radio several mornings a week, while a community facilitator is guided by the program; this has been in place for more than ten years making the annual cost per child as low as US\$5-30 depending on scale. In Indonesia, community block-grants that allow for community-based playgroups have reached 800,000 children with costs per child per year as low as US\$30; there has been a sustained impact on child development especially for the most disadvantaged children, and benefit-cost ratios have ranged from 1.3 to 4.3.³⁴ There is similar evidence of low-cost community-supported interventions in Ghana³⁵, Mongolia³⁶ and Jamaica³⁷ with long term effects on health improvements and earnings in adult life.
66. **Structured pedagogy interventions have the largest and most consistent positive effects on learning outcomes.** Recent studies in China, Vietnam³⁸, Kenya³⁹ and Ghana⁴⁰ among others have identified structured pedagogy combined with continuous feedback and re-training as one of the most effective interventions at the classroom level in terms of its impact on learning. Pilots supported by the World Bank offering remedial lessons have influenced project design.⁴¹
67. **Teacher training is fundamental to education programming.** The key elements that make for effective teacher training are: (a) linking career opportunities to professional development; (b) follow-up visits, monitoring/coaching and mentoring visits; and (c) continuous practice of new pedagogical approaches.⁴² Use of technology can support in-school teacher support. In South African public schools locally designed low-cost integrated technology (tablet-based lesson plans and e-coaching) was found to be a cost-effective alternative to on-site coaching.⁴³

Economic and Financial Analysis

68. **World Bank value-added and justification of public financing.** The World Bank’s value-added is its experience and expertise in evaluating and implementing playgroups, early grade reading interventions, and various research and capacity building activities specifically in the Pacific and Tuvalu previously. Activities financed under components 1 and 2 are the product of previous technical assistance provided by the World Bank to Tuvalu under the PEARL Program. The economic justification of public financing of pre-primary and primary school interventions is the inability of households to borrow against the resulting increased stream of future earnings of their children.

³⁴ World Bank. 2018. *Learning During the Early Years*. Washington, DC: World Bank.

³⁵ IPA. 2018. *The effects of a play-based preschool learning program in rural Ghana – Study Summary*.

³⁶ World Bank. 2018. *Growing Smarter: Learning and Equitable Development in East Asia and Pacific*. World Bank East Asia and Pacific Regional Report. Washington, DC: World Bank.

³⁷ Gertler, P., Heckman, J., Pinto, R., Zanolini, A., Vermeerch, C., Walker, S., Chang, S. M., and S. Grantham-McGregor. 2014. “Labor Market Returns to an Early Childhood Stimulation Intervention in Jamaica.” *Science (New York, N.Y.)* 344 (6187): 998–1001.

³⁸ World Bank. 2019. *Ending Learning Poverty: What will it take?*

³⁹ Bashir, Sajitha, Marlaine Lockheed, Elizabeth Ninan, and Jee-Peng Tan. 2018. *Facing Forward: Schooling for Learning in Africa*. Africa Development Forum series. Washington, DC: World Bank.

⁴⁰ Innovations for Poverty Action. 2018. *The Impacts of Fast Track Transformational Teacher Training in Ghana*.

⁴¹ Snilstveit, Birte, Stevenson, Phillips, Vojtkova, Gallagher, Schmidt, Jobse, et al. 2015 *Interventions for Improving Learning Outcomes and Access to Education in Low-and Middle-Income Countries*. 3ie Systematic Review 24. London.

⁴² Evans, David, and Anna Popova. 2015. *What really works to improve learning in developing countries? An analysis of divergent findings in systematic reviews*.

⁴³ World Bank. 2019. *Ending Learning Poverty: What will it take?*



69. **Cost-benefit analysis.** Component 1 and Component 2 improve the quality of service delivery of ECCE and primary school, ultimately improving human capital and productivity; these two components are the focus of the cost-benefit analysis. While the effects of these components on human capital and future earnings is not known ex ante in Tuvalu, strong effects coupled with rigorous evaluation methods including randomized-controlled trials of similar interventions globally provide confidence in the effectiveness of the proposed activities. The modeled internal rate of return (IRR – a measure of the costs and benefits of the project) for the two components is 12.8 percent (see Annex 3 for details). A sensitivity analysis based on the range of effects found globally for similar interventions suggests a probability of less than 5 percent of the IRR being less than 8.1 percent. These rates of return are high for early education projects and demonstrate the quality of the project as a public investment. The rigorous methodology to evaluate similar interventions globally provides assurance of the effectiveness of the proposed interventions indicating that the project represents a low-risk investment in terms of development impact.
70. **Fiscal sustainability.** Component 1 and Component 2 represent 16.4 percent and 16.9 percent of the ECCE and primary budgets (recurrent and non-recurrent), respectively. Maintaining the new activities will require non-trivial increases in education expenditure. However, the annualized recurrent cost of maintaining the activities established under Component 1 and Component 2 represent 5.1 percent of the MEYS recurrent budget estimate for 2020. Costs associated with teacher training on ECCE and TRP have large initial costs (almost 70 percent) for the development and procurement of materials. Recurrent costs will decrease over time as these training programs become incorporated in pre-service teacher training. Refresher trainings can leverage technology to reduce delivery costs. While e-readers and other materials have large upfront costs, they will have to be maintained and replaced over time and it is important that the Ministry makes provisions for these costs in their budget after the project.

B. Fiduciary

Financial Management

71. A financial management (FM) assessment was carried out in accordance with the “Principles Based Financial Management Practice Manual” issued by the Board on March 1, 2010. Under World Bank IPF Policy with respect to projects financed by the World Bank, the Recipient and the Project implementing agencies are required to maintain FM arrangements (including planning, budgeting, accounting, internal controls, funds flow, financial reporting, and auditing systems) acceptable to the Bank to provide reasonable assurance that proceeds are used for the purposes for which they are granted. These arrangements are acceptable if they are capable of correctly and completely recording all transactions and balances relating to the Project. In addition, such arrangements are acceptable if they can facilitate preparation of regular, timely and reliable information regarding project resources and expenditures and safeguard Project assets; and, are subject to auditing arrangements acceptable to the World Bank.
72. The TuLEP FM arrangements will be carried out by Education Department under the MEYS in close partnership with the MOF and CPMO. The overall FM arrangements at these entities have been recorded as satisfactory as stipulated in World Bank policies and directives on Investment Project Financing. The FM risk of the Project is assessed as “Substantial” due to the risk in retaining suitably skilled staff to complete the FM requirements of this project in a very low capacity environment. To mitigate this the Education Department will include a national project accountant throughout the life of the project and the CPMO will include a Financial Management Specialist and Finance Officer.
73. An annual audit of the Project financial statements will be required for the Project. The audited financial statements with accompanying audit report, and management letter must be received by the World Bank within six months of



the end of the fiscal year and shall be made publicly available by the Recipient in a manner acceptable to the World Bank according to the General Conditions of IDA Grants. The Supreme Audit Institution of Tuvalu are well staffed and acceptable to perform this responsibility. No withdrawal shall be made for payments made prior to the Signature Date, except that withdrawals up to an aggregate amount not to exceed SDR 600,000 may be made for payments made prior to this date but on or after January 1, 2020, for Eligible Expenditures.

Procurement

- 74. MEYS as the Project implementation agency is responsible for most of the procurement activities under the Project. The MOF is responsible for selecting consultants of CPMO under sub-component 4.2, supervising their contracts and overseeing their contributions to procurement management in Tuvalu. A Procurement Advisor within the CPMO will assist MEYS and MOF with procurement processes and will work closely with the existing Central Procurement Unit (CPU) of MOF to conduct procurement processes for relatively high-value contracts. Procurement under the TuLEP will follow the World Bank Procurement Regulations for IPF Borrowers (dated July 2016, revised in November 2017 and August 2018). A Project Procurement Strategy for Development (PPSD) was prepared by MEYS. Based on the analysis of the PPSD, a draft procurement plan covering the first 18 months of the project has been prepared.
- 75. The main procurement risks include: (a) limited capacity of MEYS, MOF and CPU; (b) lack of experience with implementing WB financed projects, especially with procurement following the WB Procurement Regulations; and (c) weak supply capacity of the national market. The key mitigation measures proposed include the following: (a) MEYS will designate specific staff for implementing procurement activities and engage a Procurement Officer to support project procurement; (b) an additional external consultant will be employed in the CPMO as a Procurement Advisor to supplement the staffing of MEYS, MOF and CPU; (c) selection of consultants for CPMO will be prioritized so that CPMO (once established) can provide necessary assistance to MEYS and MOF; (d) the WB task team will provide advice and guidance whenever necessary, including template preparation of procurement documents to be used under this project; and (e) Systematic Tracking of Exchanges in Procurement (STEP) will be used to monitor procurement progress and identify challenges or delays. Further details are elaborated in Annex 1.

C. Legal Operational Policies

	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

D. Environmental and Social

- 76. Impacts associated with the Project are expected to be largely positive. Strengthening of the education policy framework, teacher capacity and M&E of education performance are expected to lead to improved education outcomes. Beneficiaries are located across the country as the Project will be implemented in all nine islands of Tuvalu. The Environmental and Social (E&S) risks associated with Project activities are expected to be limited and easily managed through project design and effective implementation. There are no adverse environmental or social impacts associated with the project. The project does not include any physical works, does not support preparation of future investment projects and does not involve analytical, advisory or other activities which could have or lead to downstream physical, social or environmental impacts. The provision of training, awareness raising and changes



to the school curriculum are expected to result in E&S benefits overall. Positive impacts are likely to result from the research activities, a focus on vulnerable groups, reduction in discrimination, and improvements in education attendance. As a result, both E&S risks are considered low. Given the limited E&S impacts, an Environmental and Social Management Plan has not been prepared. Instead all mitigation measures are included in the Environmental and Social Commitment Plan (ESCP) developed by the government and agreed with the Bank, which includes the preparation and implementation of a Labor Management Plan and a Stakeholder Engagement Plan (SEP) (including grievance redress mechanism). The ESCP was disclosed on the Bank's website on April 29, 2020. The SEP was disclosed on the Bank's website on March 23, 2020.

V. GRIEVANCE REDRESS SERVICES

77. Communities and individuals who believe that they are adversely affected by a WB supported project may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the WB's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the WB's corporate GRS, please visit <http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service>. For information on how to submit complaints to the WB Inspection Panel, please visit www.inspectionpanel.org.

VI. KEY RISKS

78. The overall risk rating of the proposed TuLEP is assessed as **Substantial**.
79. **Risks related to technical design of project are substantial.** While the project design builds upon the success of the PEARL pilot in Tuvalu, rolling out a new methodology for teaching reading and engaging students in active learning methods nationwide requires continuous coaching and training and significant change in current practices. The project involves several sub-components, some of which are designed to build a better analytical foundation for activities which will be developed further and implemented in the later years of the project. In addition, activities such as digitizing reporting and assessment data and implementing national assessments with requisite training and sensitization for all stakeholders would be required. These would take time to be rolled out and may utilize technologies that have not been tested at scale for this purpose in Tuvalu (although such technology use has been successful elsewhere). The credibility of national assessments would need to be carefully monitored and subject to robust controls to ensure success in meeting learning outcomes. To mitigate these risks, the project will support several international and local TA to support the government with implementation of the new initiatives and interpreting data to inform policy and programming decisions. Public awareness campaigns and trainings will include sensitization of the new initiatives to garner broader community support for improved delivery of education services. Further, the project will work with other development partners to ensure harmonization of activities, and to benefit from global evidence of what works, adapted to the local Tuvaluan context.
80. **The design of the project may be further impacted by the ongoing COVID-19 emergency.** School closures for an extended period would likely delay project activities. The inability of stakeholders to hold meetings, conduct trainings, be in school and participate in playgroups combined with the restrictions on travel would limit the roll out



of all components. The development of digital materials and scripted lessons that can be part of the take home packets the government provides during school closures would help to mitigate the learning lag risks. The inclusion of hygiene and virus prevention messaging in the nurse visits and other community awareness activities would also help encourage healthy behaviors and prevention of community spreading, while supporting the safe re-opening of schools in due course. Nurse visits and community awareness will be key elements to help students, families and teachers cope with the psychological and emotional stresses of school closures. However, the uncertainty around the virus' impact remains significant given the ongoing social distancing restrictions and indefinite school closure. The proactive lock down will hopefully prevent any community transmission and Tuvalu can remain COVID-free. In addition, emergency funding was requested through the Contingent Emergency Response Component of the Maritime Investment in Climate Resilient Operations Project to help manage the economic and health impact. The TuLEP will focus on the post-emergency phase, to ensure continued safe and effective service delivery, generating data for better decision-making and increasing the capacity of the education system to respond to such challenges.

81. **The risks associated with institutional capacity for implementation and sustainability are substantial.** Neither MEYS nor the Education Department have experience implementing projects financed by the Bank or other multilateral development partners. In the extremely thin capacity environment of Tuvalu, the Education Department faces challenges in recruiting and retaining trained staff in key positions at the departmental and school level. Of the 27 positions in the Education Department, nine positions are not yet filled. Frequent and unpredictable extended absences due to 'study leave' disrupt capacity at both the MEYS and school levels. While many of the anticipated project activities, such as professional development, curriculum review, procurement of materials, delivery of training and workshops, and domestic travel logistics are commonly conducted by MEYS and the Education Department, the agencies have less experience in selection and management of consulting services for the TA activities under the project. The Education Department also faces challenges to overcome infrastructure and policy deficits, and to maintain adequate student per-capita expenditures in a budget constrained fragile small state.
82. Mainstreaming the project's implementation within existing structures will strengthen implementation capacity and ensure technical and institutional sustainability; however, it will require that operational rules, processes and systems become formalized. Additional international and national consultants will be engaged through the CPMO to support core functions such as procurement and FM. International and national consultants will be engaged by MEYS to support project coordination and provide technical advice and expertise. Relationships with regional institutions, such as EQAP, USP and UNICEF will be strengthened to enhance sustainability. The projected incremental costs of implementing the TuLEP are reasonable recurrent expenditures and are in alignment with the increases in education spending since 2012. The start-up investment costs (materials, goods, system design, policy review) and transportation costs funded by the project would not be recurrent annual outlays and are not anticipated to require an increase in the Education Department budget to be maintained after the project closes. The design of the project would also consider how to improve the use of technology to support schools across the country in a cost-effective manner once enabling infrastructure is functioning, such as the anticipated modern ICT network which is to be financed by the Bank separately as part of the Tuvalu ICT Project.
83. **Tuvalu has a small pool of local expertise in procurement and FM, which poses a substantial fiduciary risk for the project.** Aligning project procurement with country systems will help mitigate the risk with existing arrangements being utilized where possible, complemented by additional staff in the CPMO and MEYS. The introduction of a CPMO will increase expertise in country to better manage fiduciary aspects of the project and build on experiences under other Bank projects in Tuvalu. In addition, the terms of reference for the CPMO would include capacity building of procurement and financial management officers across government through training, mentoring and coaching.



VII. RESULTS FRAMEWORK AND MONITORING

Results Framework COUNTRY: Tuvalu Tuvalu Learning Project

Project Development Objectives(s)

To improve the readiness of children entering first grade and improve the reading skills of students.

Project Development Objective Indicators

Indicator Name	PBC	Baseline	End Target
Improve the readiness of children entering first grade			
Percentage of children aged 3-5 years in ECCE centers with a school readiness score above 0.7 (Percentage)		44.20	55.00
Percentage of FEMALE children aged 3-5 years in ECCE centers with a school readiness score above 0.7 (Percentage)		51.10	60.00
Percentage of MALE children aged 3-5 years in ECCE centers with a school readiness score above 0.7 (Percentage)		37.10	50.00
Improve the reading skills of students			
Percentage of students meeting the minimum reading fluency benchmark in Year 3 (Percentage)		37.70	50.00
Percentage of FEMALE students meeting the minimum reading fluency benchmark in Year 3 (Percentage)		48.40	60.00
Percentage of MALE students meeting the minimum reading fluency benchmark in Year 3 (Text)		26.10	40.00



Indicator Name	PBC	Baseline	End Target
Percentage of students meeting minimum literacy proficiency levels in Year 4 (Percentage)		32.00	45.00
Percentage of FEMALE students meeting minimum literacy proficiency levels in Year 4 (Percentage)		40.10	50.00
Percentage of MALE students meeting minimum literacy proficiency levels in Year 4 (Percentage)		24.40	40.00

Intermediate Results Indicators by Components

Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Component 1: Strengthening early childhood care and education and school readiness for all children							
Number of teachers using satisfactory play-based pedagogical practices in ECCE centers (Text)		TBD	16.00	22.00	27.00	33.00	38.00
Percentage of parents engaging in home stimulation activities with their children in the last three days (Percentage)		61.00	68.00	68.00	68.00	68.00	80.00
Number of visits from health officers/ nurse to ECCE centers annually (Number)		0.00	486.00	486.00	486.00	486.00	486.00
Share of parents/caregivers that found information disseminated through the ECCE public awareness program to		0.00	40.00	50.00	60.00	70.00	75.00



Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
be useful (Percentage)							
Component 2: Improving literacy outcomes in all schools							
Number of teachers implementing Tuvalu Reading Program (TRP) explicit instruction approach satisfactorily in Years 1-3 (Text)		0.00	10.00	15.00	18.00	21.00	24.00
Gender gap in percentage of year 3 students with zero scores in reading fluency (Percentage)		15.30	14.00	14.00	12.00	12.00	10.30
Number of teachers integrating education technology in teaching practices (Number)		8.00	12.00	20.00	30.00	40.00	50.00
Component 3: Research, learning assessment and policy review							
Number of research activities undertaken (Number)		0.00	1.00	2.00	3.00	4.00	4.00
Number of large scale learning assessments completed at the primary level (Number)		0.00	1.00	0.00	1.00	0.00	1.00
National student attendance rate (Text)		TBD					80.00
Number of schools with timely data reporting and dissemination loops established (Number)		0.00	5.00	9.00	15.00	20.00	24.00
Component 4: Strengthening institutional capacity, M&E and education sector management							
Students benefiting from direct interventions to enhance learning (CRI, Number)		0.00	800.00	1,500.00	2,000.00	2,500.00	3,000.00



Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Students benefiting from direct interventions to enhance learning - Female (CRI, Number)		0.00	400.00	750.00	1,000.00	1,250.00	1,500.00
Teachers recruited or trained (CRI, Number)		0.00	30.00	60.00	90.00	120.00	150.00
Teachers recruited or trained - Female (RMS requirement) (CRI, Number)		0.00	20.00	40.00	60.00	80.00	100.00
Percentage of transactions completed by CPMO specialists within service standards outlined in Standard Operating Procedures (Percentage)		0.00	55.00	60.00	65.00	70.00	75.00

Monitoring & Evaluation Plan: PDO Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Percentage of children aged 3-5 years in ECCE centers with a school readiness score above 0.7	School readiness is measured as the overall development score of 3-5 year old children on cognitive and non-cognitive dimensions on a scale of 0 to 1.	Biennial	TuEHCI assessment	Census survey	MEYS



Percentage of FEMALE children aged 3-5 years in ECCE centers with a school readiness score above 0.7	School readiness is measured as the overall development score of female 3-5 year old children on cognitive and non-cognitive dimensions on a scale of 0 to 1.	Biennial	TuEHCI assessment	Census survey	MEYS
Percentage of MALE children aged 3-5 years in ECCE centers with a school readiness score above 0.7	School readiness is measured as the overall development score of 3-5 year old male children on cognitive and non-cognitive dimensions on a scale of 0 to 1.	Biennial	TuEHCI assessment	Census survey	MEYS
Percentage of students meeting the minimum reading fluency benchmark in Year 3	The minimum reading fluency benchmark is set at 50 correct words per minute. This indicator is measured for children in Year 3.	Biennial	TuEGRA assessment	Census survey	MEYS
Percentage of FEMALE students meeting the minimum reading fluency benchmark in Year 3	The minimum reading fluency benchmark is set at 50 correct words per minute. This indicator is measured for female children in Year 3.	Biennial	TuEGRA assessment	Census survey	MEYS
Percentage of MALE students meeting the minimum reading fluency benchmark in Year 3	The minimum reading fluency benchmark is set at 50 correct words per minute. This indicator is measured for male children	Biennial	TuEGRA assessment	Census survey	MEYS



	in Year 3.				
Percentage of students meeting minimum literacy proficiency levels in Year 4	Percentage of Year 4 students reaching or exceeding minimum proficiency (Level 4) in literacy.	Every three years.	PILNA	Regional Survey	EQAP
Percentage of FEMALE students meeting minimum literacy proficiency levels in Year 4	Percentage of Year 4 FEMALE students reaching or exceeding minimum proficiency (Level 4) in literacy.	Every three years.	PILNA	Regional Survey	EQAP
Percentage of MALE students meeting minimum literacy proficiency levels in Year 4	Percentage of Year 4 MALE students reaching or exceeding minimum proficiency (Level 4) in literacy.	Every three years	PILNA	Regional Survey	EQAP

Monitoring & Evaluation Plan: Intermediate Results Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Number of teachers using satisfactory play-based pedagogical practices in ECCE centers	As measured through a classroom lesson observation tool	Annual	Lesson observation tool	Adapted TEACH ECE/ MELE tool	Head Teacher
Percentage of parents engaging in home stimulation activities with their children in the last three days	Simple average of percentage of parents who engaged in the following home stimulation activities as measured through	Biennial	TuEHCI assessment	Census survey	MEYS



	TuEHCI - read a book, told a story, sung songs, played (not at home), played with child and named, counted or drew. Baseline is obtained from 2016 TuEHCI data, but will be updated using data from 2020 MICS once available.				
Number of visits from health officers/nurse to ECCE centers annually	Nurses visit ECCE centers to collect information on student health and nutrition and raise community awareness. The annual target of 486 visits is calculated as 9 visits per term (3 terms) at 18 ECCE centers.	Annual	Administrative records	Nurses document number of visits - data is compiled by MEYS.	MEYS
Share of parents/caregivers that found information disseminated through the ECCE public awareness program to be useful	This citizen engagement indicator measures the share of parents/caregivers who attend playgroups at ECCE centers reporting on whether ECCE awareness program is useful to meeting their child's development needs. Measured on Likert scale through beneficiary survey (Beneficiary Feedback indicator).	Annual	Beneficiary survey	Beneficiary survey	MEYS



Number of teachers implementing Tuvalu Reading Program (TRP) explicit instruction approach satisfactorily in Years 1-3	As measured through a classroom lesson observation tool	Annual	Lesson observation tool	Adapted TEACH/TRP tool	HTs
Gender gap in percentage of year 3 students with zero scores in reading fluency	Measured as the difference between percentage of boys and girls with zero correct responses in the reading fluency assessment (Gender Gap Indicator).	Biennial	TuEGRA assessment	Census survey	MEYS
Number of teachers integrating education technology in teaching practices	Number of primary or secondary school teachers that incorporate learning activities through tablets, computers or e-readers in classes at least 3 times per term.	Annual	Lesson plans or timetable for each teacher	HTs record the number of lessons that integrate education technology for each teacher	HTs
Number of research activities undertaken	Proposed areas of research include absenteeism, enrolment and retention, workforce planning (cumulative)	Annual	Research reports	Based on reports finalized for dissemination	MEYS
Number of large scale learning assessments completed at the primary level	Number of large scale learning assessments for which the project supports operationalization, data collection, analysis or reporting (non-cumulative)	Biennial	MEYS	TuEGRA reports	MEYS
National student attendance rate	Measures the number of students present on a given day as a percentage of total enrolment in a school. It will	Annual	Attendance records	HTs will collect attendance data in schools at least once a week and report termly	MEYS



	be measured for all primary schools.			averages. This will be centrally compiled and annual averages computed for each school. The average across all schools will be reported here.	
Number of schools with timely data reporting and dissemination loops established	Measures the number of schools that report termly attendance and inventory data as well as annual school census data within 3 weeks and receive a school overview report within 3 months of the end of the school year. The school report will be based on data from the Annual Statistical Report and will contain data on key performance indicators including student and teacher attendance.	Annual	Administrative records	TEMIS, procurement and attendance data	MEYS
Students benefiting from direct interventions to enhance learning		Annual. Targets are cumulative.	TEMIS	Annual school census	MEYS ICT Unit
Students benefiting from direct interventions to enhance learning - Female		Annual	TEMIS	Annual school census	MEYS ICT Unit



Teachers recruited or trained		Annual	Administrative records	This indicator covers all professional development programs supported by the project. Targets are cumulative. In-service teacher training records are maintained and compiled by MEYS.	MEYS
Teachers recruited or trained - Female (RMS requirement)		Annual	Administrative records	In-service teacher training records are to maintained and compiled by MEYS	MEYS
Percentage of transactions completed by CPMO specialists within service standards outlined in Standard Operating Procedures	Percentage of transactions planned under annual work program completed by CPMO specialists within service standards outlined in Standard Operating Procedures.	Semester	CPMO project progress reports	Transaction log	Ministry of Finance, Department of Finance

ANNEX 1: Implementation Arrangements and Support Plan

Implementation Arrangements

1. The Education Department within the Ministry of Education Youth and Sport (MEYS) will be the implementing agency (IA) for components 1, 2, 3 and 4.1 of the Project. Component 4.2 will be implemented by MOF.
2. Implementation of project activities will be primarily embedded within the Education Department to increase likelihood of sustainability, as interventions are intended to be integrated into current processes. As a result, different units within the Education Department will take the lead on activities under components 1, 2 and 3, depending on the area of focus, with several activities requiring collaboration across units. The Department comprises the Office of the Director of Education (including administration and procurement), Curriculum Development Unit, Assessment and Examinations Unit, School Supervisory Unit (including ECCE, Primary and Secondary), and the ICT Unit. Each unit will play a role in project implementation, and where required, technical assistance, either through local support, regional institutions, or international consultants, will be provided under the project to improve the effectiveness of interventions, and build local and regional capacity. The project will not finance civil servant salaries.

Table A1.1: Responsibilities for Implementation

Component		Implementing Agency/ Department
Strengthening early childhood care and education and school readiness for all children		
1.1	Strengthen the delivery of ECCE services	ECCE Unit in collaboration with MOHSWGA (for nurse visits) and USP (for teacher training)
1.2	Conduct public awareness program and community outreach	ECCE Unit in collaboration with MOHSWGA and TRP Team
Improving Literacy Outcomes in all Schools		
2.1	Implementation of the Tuvalu Reading Program (years 1-3)	TRP Team under Curriculum Development Unit (CDU)
2.2	Strengthening literacy in all schools through teaching and learning innovations and enrichment activities	CDU and ICT Unit
Research, Learning Assessment and Policy Review		
3.1	Strategic research, surveys and analysis	School Supervisory Unit (SSU) with support from ICT Unit
3.2	Strengthening the education policy framework	SSU and CDU
3.3	Measurements of school readiness and student learning	Assessment and Examinations Unit in collaboration with SSU
Strengthening institutional capacity, monitoring and evaluation and education sector management		
4.1	Project Management support	MEYS – Dept. of Education
4.2	Central Project Management Office (CPMO)	MOF



3. The Government of Tuvalu plans to establish a Central Project Management Office (CPMO) to sit within MOF. The CPMO will be comprised of international and national staff in project management, procurement, financial management, safeguards and monitoring & evaluation roles. The CPMO will oversee and provide hands-on support in the coordination, preparation and implementation of World Bank financed development projects in Tuvalu. The CPMO will also provide capacity building for the different government ministries implementing World Bank-funded projects. It has been indicated that this office may support other donor funded projects implemented by the Government in future. Oversight of the CPMO (Component 4.2) will be ensured by the existing National Project Steering Committee established by the Government of Tuvalu to oversee implementation of infrastructure projects. The CPMO will be established by Cabinet directive. The CPMO will be established within three months of the effective date of the Financing Agreement.
4. From the establishment of the CPMO, new World Bank financed projects, including TuLEP, will be able to draw on the expertise within the CPMO to support cross cutting project management functions and obtain advice and support from internationally qualified advisors in areas where limited local capacity is available, such as for example the Procurement Advisor. A procurement advisor will be recruited to the CPMO within three months of the effective date of the Financing Agreement. However, IAs may also engage additional project management personnel, particularly as nationally recruited consultants, to support day-to-day implementation of their respective projects. The CPMO will work closely with a Project Coordinator within the IA and with the existing Central Procurement Unit. The Project Coordinator and Deputy Project Coordinator within the Education Department will be responsible for the day-to-day coordination of the implementation of components 1, 2, 3 and 4.1 of TuLEP. The Project Coordinator and Deputy Project Coordinator within the Education Department will be recruited within three months of the effective date of the Financing Agreement.
5. A multi-sectoral committee would be established to oversee Components 1, 2, 3 and 4.1 of the Project. The **Project Steering Committee** would ensure coordination among the stakeholder ministries (including MEYS, MOF and MOHSWGA) and provide a platform for regular information sharing and project progress reporting. It would comprise of representatives from MOF, MEYS, MOHSWGA, MLGA, and Kaupule. The Project Steering Committee will be established within three months of the effective date of the Financing Agreement.
6. To support project implementation of components 1, 2, 3 and 4.1 the following will be prepared and adopted by the MEYS:
 - a. **Processes and Procedures Manual:** Within three months of the effective date of the Financing Agreement, the Draft Education Department Processes and Procedures Manual will be finalized to incorporate institutional arrangements for day-to-day execution of the project including but not limited to: (i) implementation arrangements; (ii) the procurement procedures and standard procurement documentation; (iii) reporting requirements, financial management procedures and audit procedures; (iv) the Project performance indicators; (v) implementation arrangements for the Environmental and Social Commitment Plan and the environmental and social instruments; (vi) monitoring and evaluation arrangements; (vii) arrangements to ensure the protection and appropriate collection, use, management and storage of personal data collected through the Project; (viii) communication arrangements; and (ix) the criteria and procedures for selecting any additional activities to be carried out under Components 2.2(f) and Component 3.2(d) of the Project. The Education Department Processes and Procedures Manual will need to be



maintained to ensure new procedures and processes developed under the Project are mainstreamed into the Ministry’s operations, and staff will need to be trained in its application.

- 7. To support project implementation of component 4.2 the following will be prepared and adopted by the MOF:
 - a. **Standard Operating Procedures (SOPs) for the CPMO.** The SOPs will outline detailed arrangements for the organization, operation and supervision of the CPMO; coordination between the CPMO, implementing agencies, project steering committees and other project stakeholders; and service standards for the CPMO. The SOPs will also outline arrangements for day-to-day execution of all World Bank financed projects in Tuvalu including: the preparation and successive updates of project workplans; the preparation and successive updates of project Procurement Plans and their implementation arrangements; implementation arrangements for project Safeguards instruments; budgeting, disbursement and financial management arrangements; project monitoring, reporting, evaluation and communication arrangements; and any other administrative, financial, technical and organizational arrangements and procedures as necessary. The SOPs shall be prepared within three months of the effective date of the Financing Agreement.
- 8. An annual work plan and budget will be submitted for World Bank review not later than four months before the commencement of that year (by August 30) for each year the project is active. A mid-term review will be conducted no later than three years after the effective date of the Financing Agreement.

Implementation support

- 9. Table A1.2 below provides the implementation support plan and Table A1.3 provides the expected skills mix required for the proposed project.

Table A1.2. Type of Implementation Support

Time	Focus	Skills needed	Resource Estimate
0 – 12 months	Creating project implementation momentum through institutional capacity strengthening, finalization of Processes and Procedures Manual and Standard Operating Procedures, preparation for teacher training and student assessment, equipment, nation-wide connectivity for digital learning and education technology, consultant packages and technical assistance for technical design (including fiduciary preparation)	Project management, operational, technical (including M&E), fiduciary, environment and social	At minimum, three formal implementation support missions. Just-in-time technical assistance.
12 – 24 months	Continued institutional capacity enhancement, implementation monitoring, operational and technical assistance to support implementation	Project management, operational, technical (including M&E), fiduciary, environment and social	Two formal implementation support missions; short review missions, just-in-time technical assistance



Midterm Review	Midterm review and identification of midcourse adjustments	Project management, operational, technical (including M&E), fiduciary, environment and social	Comprehensive Midterm Review mission
24 – 60 months	Implementation monitoring, operational and technical assistance to support implementation	Project management, operational, technical (including M&E), fiduciary, environment and social	Two formal implementation support missions; short review missions, just-in-time technical assistance
Completion phase	Implementation Completion Report and final payments	Project management, M&E and fiduciary	ICR mission

Table A1.3. Team Skills and Time Allocation (Annual)

Skills Needed	Weeks	International trips	Comments
Team Leadership and cross cutting implementation support	24	2	HQ and Regional Office based
Senior Operations Officer	10	2	Regional Office based
Technical specialist	10	2	Regional Office based
FM specialist	4	2	Remote support, travel as required
Procurement specialist	4	2	Remote support, travel as required
Social safeguards specialist	4	0	Remote support, travel as required
Environmental safeguards specialist	4	0	Remote support, travel as required
Communications specialist	2	0	Remote support, travel as required
Consultants (technical, e.g., ECCE specialist, Linguist)	12	2	Remote support, travel as required
Administrative support	6	0	Remote support

Financial Management

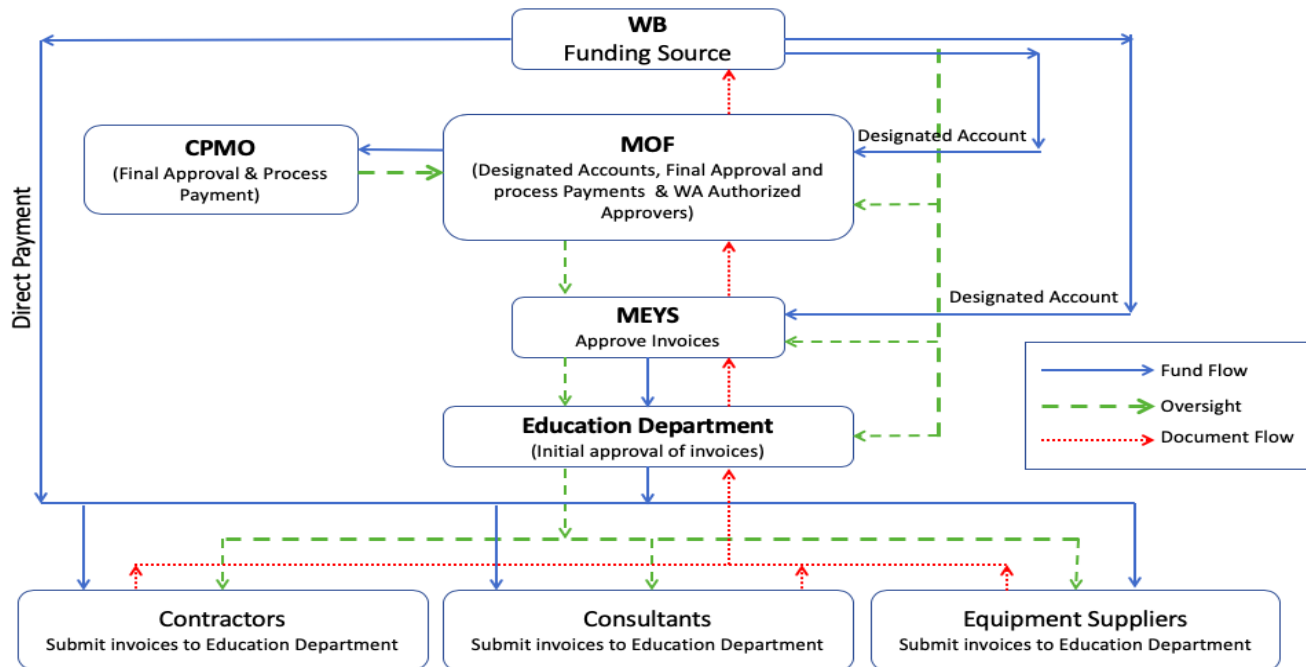
Financial Management Risk and Mitigation Measures

10. Under World Bank Policy for Investment Project Financing with respect to projects financed by the World Bank, the borrower and the project implementing agencies are required to maintain FM arrangements (including planning and budgeting, accounting, internal controls, funds flow, financial reporting, and auditing systems) acceptable to the World Bank to provide reasonable assurance that the proceeds are used for the purposes for which they are granted. These arrangements are deemed acceptable if they are capable of correctly and completely recording all transactions and balances relating to the project. In addition, such arrangements are acceptable if they can facilitate the preparation of regular, timely and reliable information regarding project resources and expenditures and safeguard the Projects assets and are subject to auditing arrangements acceptable to the World Bank.



11. **Budgeting.** At the direction of the Executive Officers within the MEYS and the Education Department, the project team will prepare annual work plans and budgets with appropriate levels of detail (for example, component or sub-component). A broad budget will cover the life of the project and a more detailed budget will be prepared at least 4 months in advance of the start of the year for each calendar year. The budget should be reviewed and amended as required and should be consistent with the procurement plan for procurable items.
12. **Accounting staff and maintenance of accounting records.** The Executive Officers within the MEYS and the Education Department are responsible for financial management and the Ministry retains vote keepers as accounting staff. In addition to the FM Specialist and Finance Officer to be housed in the CPMO, it is recommended that provision is made in the project budget for the financing of a national project accountant, as the FM demands of this project will substantially require a dedicated officer. It is highly desirable that the person have strong project management accounting skills. The Government of Tuvalu has moved to accounting on a modified accrual basis and plans to move to full accrual basis over the next five years. The project will follow the modified accrual basis of accounting and copies of all accounting records for the Project will be required to be maintained and made available to both auditors and the WB, as required. The Government of Tuvalu is in the process of changing its whole of government Integrated Financial Management Information Systems (IFMIS) Sage 300 and as such it is recommended that the project accounts be maintained on Myob. The accounting software package will be purchased under the project.
13. **Funds flow.** Two segregated Designated Accounts (DAs) in Australian Dollars will be established for the project at the National Bank of Tuvalu to enable funds to flow from the World Bank to the project (one DA for MEYS and one for MOF). Withdrawal Applications will be prepared by project staff but MOF staff will be the authorized signatories for approving the Withdrawal Applications. Retroactive financing shall be available for an amount up to SDR 600,000 for payments made by the Project against eligible expenditures incurred prior to signing date of the Financing Agreement of the Project, but on or after January 1, 2020.

Figure A1.1: TuLEP Funds Flow





- 14. **Internal control.** The Government of Tuvalu accounting processes ensure authorization and payment processes are clearly segregated; however, particular care will need to be taken to ensure adequate segregation of duties of noncompatible tasks to reduce the risk of error and misuse of funds. This is often more challenging in smaller organizations and generally the project team will be responsible for generating and processing documentation and MEYS and MOF staff will be responsible for the authorizations.
- 15. **Periodic financial reporting.** The Project will be required to prepare semester interim unaudited financial reports (IFRs) in a format agreed upon with the Bank. The IFRs will be required to be submitted not later than 45 days after the end of the reporting period. The format will be developed and agreed by the Education Department, MOF and the WB before the due date for the submission of the first IFRs.
- 16. **External audit.** An annual audit of the project financial statements will be required to be undertaken by the Tuvalu Audit Office. The audited financial statements with accompanying audit report, and management letter must be received by the WB within six months of the end of the fiscal year and shall be made publicly available by the Recipient in a manner acceptable to the WB according to the General Conditions of IDA Grants.
- 17. **Disbursement Methods and Supporting Documentation Arrangements.** IDA financing of the project will be at 100%, inclusive of taxes; project expenditures eligible for IDA financing are in Table A1.5, Eligible Expenditures and Allocation of IDA funds below. Four disbursement methods will be available for the project: (a) advance; (b) reimbursement; (c) direct payment; and (d) special commitment. Supporting documentation for disbursements, ceiling of designated accounts, minimum application value, etc. will be outlined in the Disbursement and Financial Information Letter.

Table A1.4. Funding Sources

Source	Amount (SDR, millions)	Amount (Expressed in USD equivalent)	Share of Total (%)
World Bank - IDA grant	10,300,000	14,000,000	100
Total	10,300,000	14,000,000	100

Table A1.5. Eligible Expenditures and Allocation of IDA funds

Category	Amount of the Grant Allocated (Expressed in SDR)	Amount of the Grant Allocated (Expressed in USD equivalent)	Percentage of Expenditures to be Financed (Inclusive of Taxes)
(1) Goods, non-consulting services, consulting services, operational costs, and training and workshops, for Components 1, 2, 3 & 4.1	8,100,000	11,000,000	100



(2) Goods, non-consulting services, consulting services, operational costs, and training and workshops, for sub-component 4.2 (Operational Support for CPMO)	2,200,000	3,000,000	100
Total Amounts	10,300,000	14,000,000	

Table A1.6: FM Supervision Plan

FM activity	Frequency
Desk reviews	
Unaudited interim financial reports - review	Half -yearly
Annual audit report - review	Annually
On site visits	
Formal supervision	Half yearly initially, then Annually based on risk and performance ratings.
Monitoring of actions taken on issues highlighted in review of the interim financial reports and audit reports, auditors' management letters, and other applicable reviews	As needed.
Transaction reviews (if needed)	On an as needed basis, and in the case of any issue arising.

Procurement

18. The procurement under TuLEP will follow the World Bank Procurement Regulations for IPF Borrowers (July 2016, revised in November 2017 and August 2018) ("Procurement Regulations"). MEYS is the project implementation agency and responsible for most of the procurement activities under the Project, and MOF is responsible for selecting consultants of CPMO, supervising their contracts and managing their performance. In line with the current arrangement within the Government, the Central Procurement Unit (CPU) is responsible for conducting procurement processes for relatively high-value contracts ("major procurement" as specified in the Public Procurement Regulations, 2014). In order to simplify the procurement arrangements, the TuLEP will follow the existing arrangements within the Government. The procurement documents issued by the CPU will also be used for procurement activities below the thresholds for international competition. The intention of these arrangements is to utilize and strengthen the existing capacity of the government system. The procurement risk assessment of MEYS identified the following potential procurement risks, and identified the following corresponding mitigation measures:

Table A1.7: Procurement Risks and Mitigation Measures

Risk Description	Description of Mitigation	Risk Owner
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Limited capacity of MEYS, MOF and CPU	<ul style="list-style-type: none"> The World Bank Procurement Regulations for IPF Borrowers, and related guidance notes, will be disseminated to concerned agencies early on in project preparation. MEYS and MOF will designate specific staff for procurement under their parts of the project. Additional external consultants will be employed to supplement the staffing of MEYS, MOF and CPU. Selection of consultants for CPMO will be prioritized so that CPMO (once established) can provide necessary assistance to MEYS and MOF. The World Bank task team will provide advice and guidance whenever necessary, including preparation of templates of procurement documents to be used under the project. 	MEYS, MOF and CPU
Lack of experience with implementing World Bank financed project, especially with procurement following the World Bank Procurement Regulations	<ul style="list-style-type: none"> Using external consultant(s) to supplement technical capacity. The World Bank task team will provide necessary assistance when necessary. CPMO staff will have specific capacity building mandate. 	MEYS, MOF and CPU/World Bank
Limited capacity of local market	<ul style="list-style-type: none"> For relatively high-value contracts, broader advertisement will be published (e.g. on UNDB online) and potential bidders/consultants will be invited directly. The procurement activities will be consolidated to attract maximum interest from the international market. 	MEYS, MOF and CPU

19. **PPSD and Draft Procurement Plan.** MEYS has prepared the draft PPSD and a procurement plan for the first 18-month period. These were reviewed and finalized during appraisal. The PPSD will be uploaded into STEP for the Bank’s approval. Key conclusions from the PPSD include: (1) most individual consultants will be selected from within Tuvalu because of the language requirement; (2) to simplify the procedure and reduce transaction costs, existing partnerships with regional partners will be used including the EQAP; (3) the consulting services are grouped so as to reduce the number of contracts. At the same time, the PPSD identified the risk of high number of contracts which may challenge the capacity of MEYS and CPU for conducting procurement and managing the contracts. This will be mitigated by including consultants to supplement the capacity of MEYS and CPU, as well as necessary support from the World Bank task team.

20. The 18-month procurement plan includes the following categories of procurement:

Table A1.8: Summary Procurement Plan

Description	Procurement Category	Procurement Method	Estimated Amount (US\$)
Play-based resource kits for ECCE Centres, eReaders, ICT equipment, office furniture and equipment (5 contracts)	Goods	RFQ and RFB	1.04 million



Consulting services for project implementation support, technical assistance, studies, etc. (29 contracts)	Consulting Service	Selection of individual consultant, CQS and direct selection	4.38 million
Printing and publication services	Non-consulting service	RFQ	0.25 million

Note: RFQ = Request for Quotations; RFB = Request for Bids; CQS = Consultant Qualification Selection

21. In accordance with paragraph 5.9 of the Procurement Regulations, the Bank’s STEP system will be used to prepare, clear and update Procurement Plans and conduct all procurement transactions for the Project.

22. **Frequency of procurement mission.** In addition to the prior/post review to be carried out by the World Bank, procurement mission will be undertaken at least once per year.



ANNEX 2: Detailed Project Description

1. The Tuvalu Learning Project (TuLEP) builds on the analytical work carried out under the recently closed Pacific Early Age Readiness and Learning (PEARL) Program (2014-2019), funded by the Global Partnership for Education and executed by the World Bank in Tuvalu and other countries in the Pacific. The development objective of PEARL was to improve evidence-based policy and programming decisions on school readiness and early grade reading in Papua New Guinea and Pacific Island countries. This was achieved through: (a) piloting school readiness and early grade reading interventions and measuring their impact; (b) providing on-demand technical assistance to increase countries' evidence base on school readiness and early grade literacy; and (c) facilitating knowledge exchange between governments and education stakeholders in the Pacific. School readiness interventions were focused on increasing parental, caregiver and community awareness of the importance of early childhood development, child stimulation and play-based learning through community-led playgroups and public awareness campaigns. Early grade reading interventions involved development and provision of scripted explicit lessons for teachers and other learning resources⁴⁴ for students and teachers for use in local language reading classes in Years 1 and 2 of primary school, and training and coaching of teachers in the use of the PEARL reading program. Results, recommendations and lessons learned from the PEARL Program were presented through various reports across the five-year program, with an operational guide developed to consolidate lessons from the program and provide guidance to practitioners planning to adopt or implement similar activities in other countries, particularly across the Pacific.⁴⁵
2. In Tuvalu, PEARL carried out surveys of school readiness (using TuEHCI) and early grade literacy (using TuEGRA), and piloted interventions to provide the government with evidence of what works to improve school readiness and early grade reading skills of children. The playgroups under the school readiness intervention were hosted by preschools and facilitated by preschool teachers (Playgroups@Preschool). The local language reading intervention was developed in Year 1 only of primary school using scripted lessons for teachers and student activity books. Based on the positive results of these pilots (see Figure A2.1), as well as encouraging results from a randomized control trial (RCT) impact evaluation (IE) of the PEARL Program in Tonga (Figures A2.2, A2.3) and results from a PEARL Reading Program in Kiribati (Figure A2.4), the government developed the Tuvalu Early Education Roadmap 2019-2023 to scale up the successes of PEARL, and do more to strengthen children's early experiences, both in preparing them for formal schooling, and improving their reading skills through improved teaching practices in the early grades of primary education.

⁴⁴ The full package of materials developed for the early grade reading intervention in Tonga included: Teacher Guide (with scripted lessons), Student Writing Book, Student Activity Book, Poster Book of locally drawn images, Homework Book, and a set of Student Readers (read aloud books and partner reading).

⁴⁵ Vu, Binh Thanh et al., Implementing and Evaluating Interventions to Improve School Readiness and Early Literacy: Experience from the Pacific Early Age Readiness and Learning Program: Operational Guide (English). Washington, D.C.: World Bank Group. <http://documents.worldbank.org/curated/en/981801563250242375/Operational-Guide>



Figure A2.1. Key impacts of PEARL Tuvalu reading program

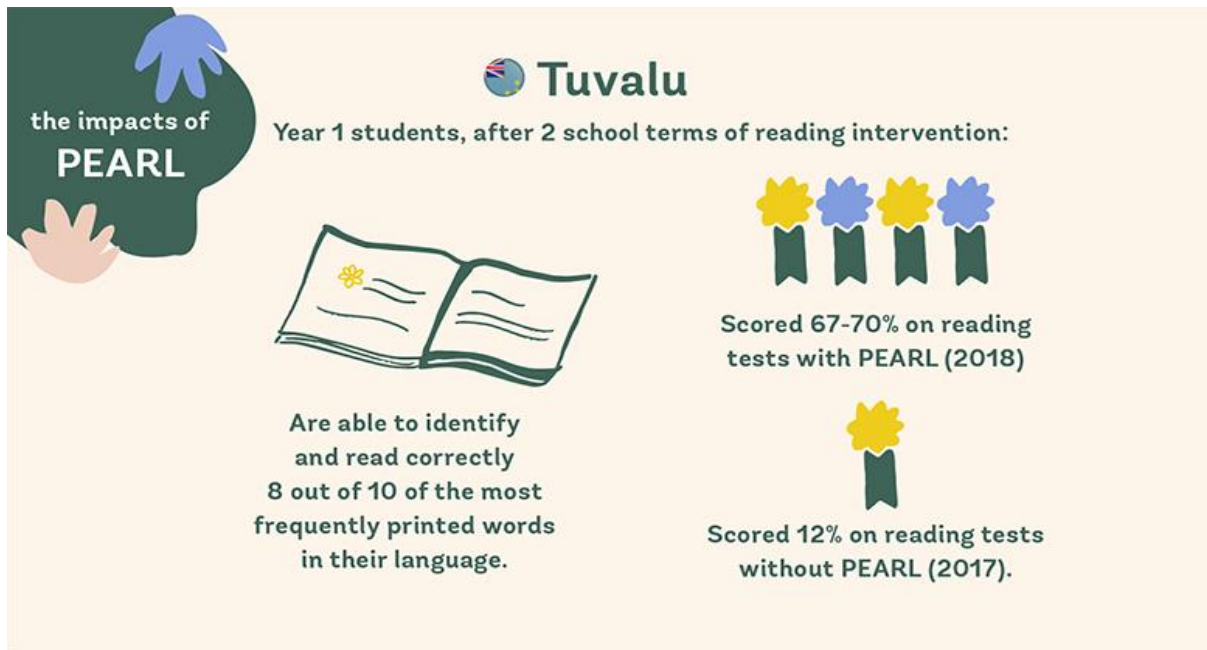


Figure A2.2. Key impacts of PEARL Tonga school readiness program (measured by RCT IE)

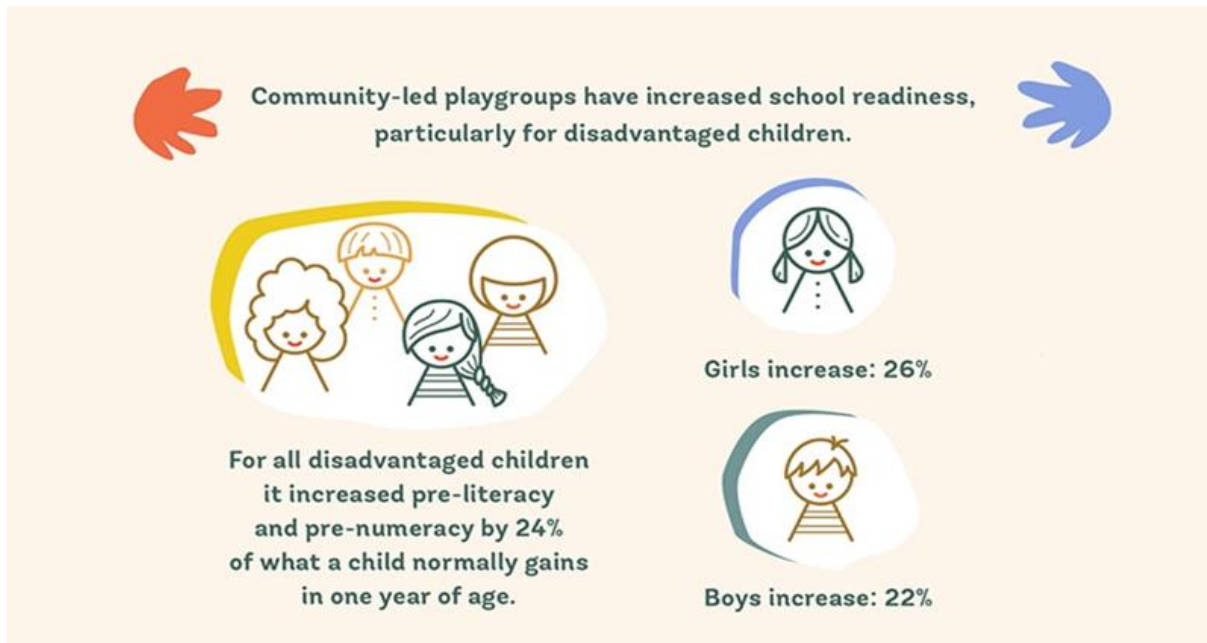


Figure A2.3. Key impacts of PEARL Tonga reading program (measured by RCT IE)

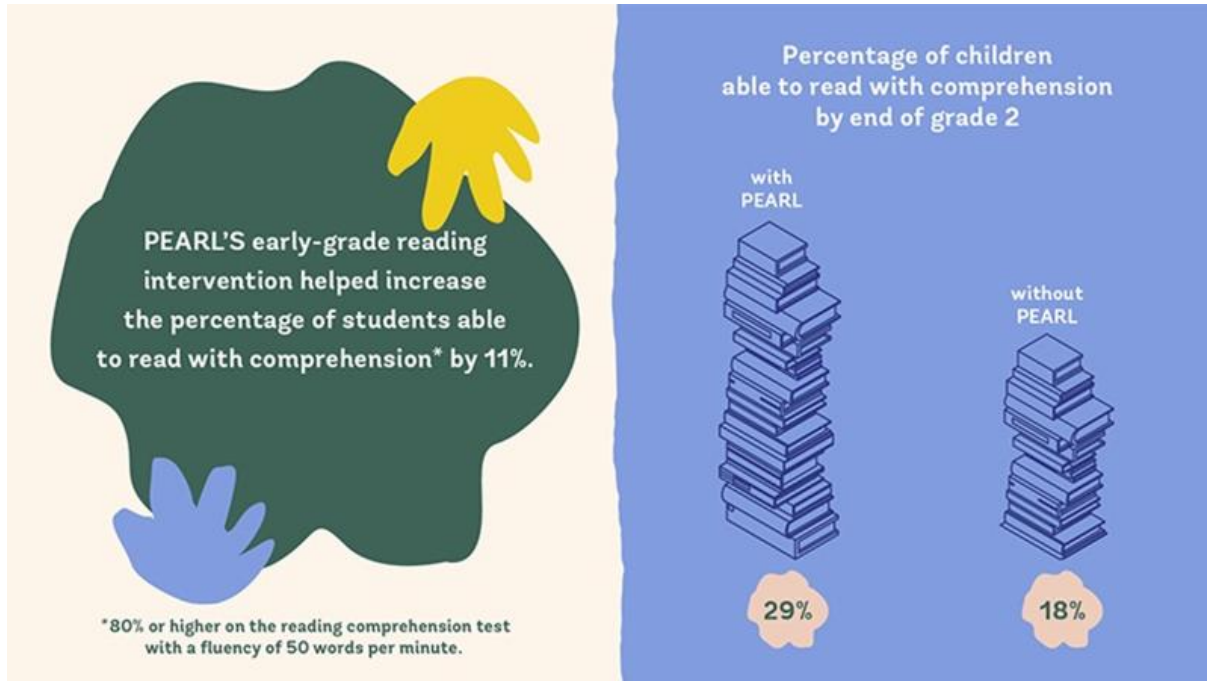
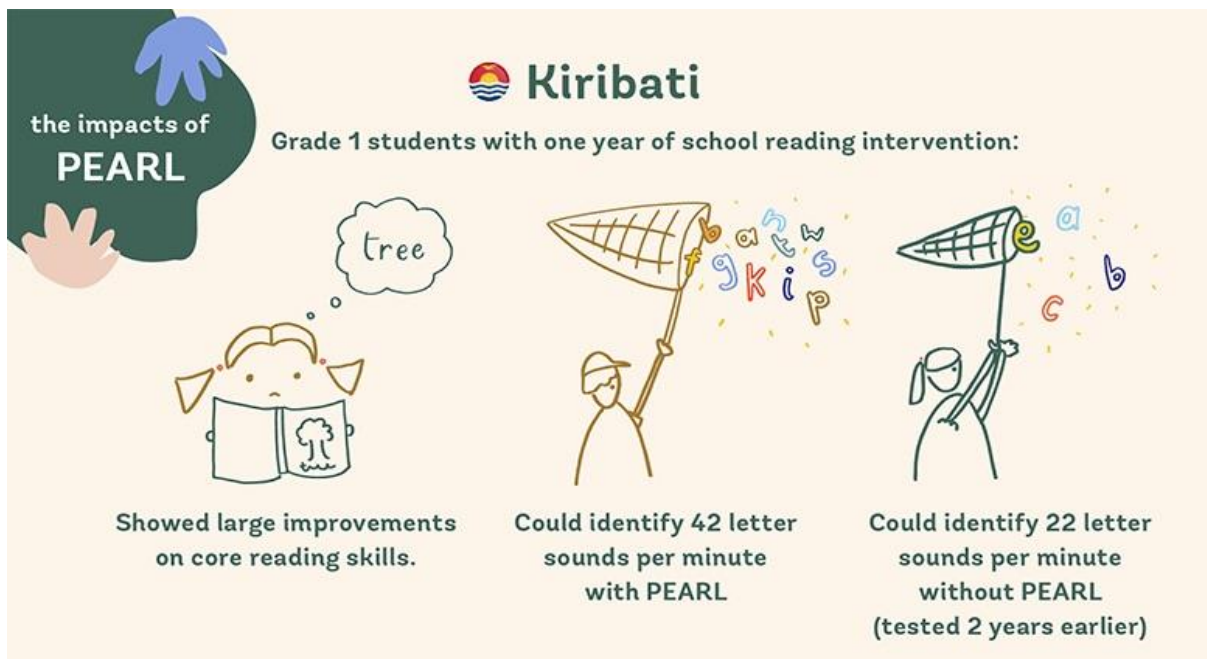


Figure A2.4. Key impacts of PEARL Kiribati reading program





3. Based on the Tuvalu Early Education Roadmap, the project will scale up the PEARL activities across all Early Childhood Care and Education (ECCE) centers and primary schools in Tuvalu (18 ECCE centers and 10 primary schools), and expand them to further strengthen the services delivered at the ECCE level, broaden interventions at the primary level beyond the early grades, and support education system-level strengthening aligned with what the government and other development partners in Tuvalu are supporting and planning. While school-based interventions would focus on preschool and primary education, given the small size of the education sector and the urgency of building human capital across all beneficiaries, the TuLEP would include support for the education system from ECCE to secondary, and also foster the relationship between education and health in the early childhood space. System-level activities would support assessments (e.g. TuEGRA, TuEHCI, PILNA), policy reviews (e.g. curriculum, teacher policy), survey/research (e.g. absenteeism, gender gaps), teacher professional development (in-service training and coaching) and school leadership strengthening. In addition, the project will support key actions related to improving school safety and resilience, such as inclusive evacuation procedures aligned with the recently approved Development Policy Operation and a risk assessment of schools, including climate and disaster resilience, funded under the GFDRR, as well as activities related to school health, such as nutrition.
4. In order to achieve the PDO, the project consists of four components: (a) strengthening early childhood care and education and school readiness for all children; (b) improving literacy outcomes in all schools; (c) research, learning assessment and policy review; and (d) strengthening institutional capacity, monitoring and evaluation and education sector management. All resources developed under the project, including training materials, classroom resources, policy recommendations and dissemination materials, will include: (i) gender-sensitive language and images to foster a culture of respect for all genders and sexualities; (ii) inclusive language and images to foster a culture of respect for all peoples irrespective of their culture or ability; (iii) concepts that appeal to all genders and interests to develop and maintain an interest in reading and learning; and (iv) climate mitigation and adaptation awareness-raising concepts, to help all teachers, students, school leaders and government staff to understand the impacts of climate change and what they can do to mitigate the impacts and adapt to the changing world around them in their everyday life. The project will not finance civil servant salaries.
5. **Component 1: Strengthening early childhood care and education and school readiness for all children (estimated costs US\$1.8 million equivalent).** Component 1 aims to support the delivery of ECCE services and community engagement to improve school readiness of all children in Tuvalu, recognizing outreach to communities, parents and caregivers is central to improving health and education outcomes. This component would strengthen the capacity of ECCE centers to deliver services to all children, including through: (a) professional development of ECCE teachers to deliver the new ECCE curriculum and lead weekly playgroup sessions with caregivers and children, and resourcing ECCE centers to deliver these services; and (b) sensitization of communities, churches and caregivers on the importance of early childhood stimulation, health, nutrition and education. The ECCE centers with support from the Ministry of Health, Social Welfare and Gender Affairs (MOHSWGA) through nurses, and playgroups, encourage this linkage and help sensitize teachers and caregivers in child stimulation, health and nutrition, the importance of education, and inclusivity. This component would also implement recommendations and activities identified in the assessments conducted under Component 3.2(a) of the Project, all selected in accordance with the criteria and procedures detailed in the Process and Procedures Manual
6. *Sub-component 1.1: Strengthen the delivery of ECCE services.* This sub-component aims to strengthen the delivery of ECCE services by improving the capacity of preschool teachers through improved training and resources to deliver quality ECCE services and supporting regular nurse visits to ECCE centers. To achieve this, the project will: (a) provide annual professional development to ECCE teachers on the ECCE curriculum and playgroup methodology (play-based



learning with caregivers and their young children) piloted under the PEARL Program, and training on gender, GBV, child protection, child well-being and disability inclusion; (b) provide support to conduct weekly playgroups at all 18 ECCE centers across the country; (c) provide preschool learning materials, activities and resources aligned with the new curriculum and playgroup kits to the centers annually; (d) develop and provide age-appropriate reading resources to ECCE centers, including training for teachers on writing and illustrating books themselves; and (e) support regular nurse visits to ECCE centers to carry out child health and hygiene monitoring⁴⁶ and discussions with caregivers⁴⁷. This sub-component will be led by the ECCE Unit, coordinating with the MOHSWGA as needed on nurse visits to ECCE centers. International TA will be provided to support the playgroup activities, and a local Playgroup Consultant will be hired to support the ECCE Unit in carrying out activities related to playgroups, as capacity for these activities does not currently exist within the Education Department.

7. **Professional development for ECCE teachers.** UNICEF have agreed to provide technical assistance (TA) to Tuvalu to develop implementation packages and resource ideas in the areas of ECCE policy, curriculum, learning through play, and systems reviews in 2020 and 2021, with possible support for at least one other related area from 2023-2025. The project will support implementation of the professional development packages. Teacher training will be led by the local Playgroup consultant hired under the project to support the ECCE division of the MEYS. The local Playgroup consultant will also support ECCE centers to carry out regular playgroups, ensuring that the centers have the resources they need, and that center staff are trained and understand their role in facilitating playgroup sessions. An international Playgroup consultant will be hired as needed to provide training to the local Playgroup consultant on best practice examples of playgroup activities, encourage ECCE center staff and communities to come up with their own ideas for activities, and to help ECCE center staff identify cheap and local materials to resource preschool and playgroup activities. The Ministry will collaborate with the USP to include all training resources developed as an additional module to the pre-service teacher training curriculum to ensure institutionalization, cost-effectiveness and long-term sustainability.
8. **Play-based resources for ECCE centers.** Resources required to implement the ECCE curriculum and playgroups will be identified by ECCE centers and communities according to a checklist provided by the ECCE division. Procurement of resources will be carried out centrally by the CPU and sent to ECCE centers according to their list of resource needs. Some of the resources that can be made locally, such as play kitchens, tables, jigsaws, wooden blocks, will be discussed with Technical and Vocational Education Training (TVSD) Officers in the Education Department, who could include as appropriate into the TVSD curriculum so that TVSD students are able to build or create resources for their local ECCE centers. Safety of young children will be a key consideration in determining appropriate resources and materials used and developed, keeping in mind the lack of access to proper quality assurance processes in the outer islands.
9. **Age-appropriate reading resources.** Development of age-appropriate reading resources will be led by the ECCE division in collaboration with the Tuvalu Reading Program (TRP) Team, who are also developing reading resources for children in the early years of primary education under sub-component 2.1. Training will be provided to teachers and communities (both male and female caregivers) on how to develop reading resources for young children in local language, including simple stories with pictures. The project will also support printing of reading resources and make them available for all ECCE centers in sufficient quantities to allow all children to access printed reading materials in

⁴⁶ The project could support screening for hearing and vision disabilities.

⁴⁷ Nurses could provide teachers and parents with information on the Family Protection and Domestic Violence Act 2014 (FPDVA) and child protection legislation and policies (when finalized) during these visits, and domestic conduct violence screening and awareness with mothers and female caregivers.



local language. Caregivers will have the opportunity to borrow reading resources from ECCE centers to enable them to read at home with their children.

10. **Nurse visits.** Under the MOHSWGA, community nurses are currently carrying out visits to ECCE centers, though these are not occurring as frequently as intended. The project will support the strengthening of this relationship between MOHSWGA and MEYS and ensure the nurse visits are carried out with greater regularity and with sufficient resources, including carrying out screening of hearing and vision. Caregivers will be encouraged to attend these sessions (ideally the timing would be aligned with the playgroup sessions) to help the visiting nurse with filling out information about the children, and also to learn more about health, nutrition, hygiene and access to domestic violence services⁴⁸. The project will provide equipment for nurses to screen hearing and vision, funding for nurses to travel to the centers, printing of resources, and other costs related to carrying out the parenting awareness program.
11. *Sub-component 1.2: Conduct public awareness program and community outreach.* This sub-component aims to raise the understanding of parents, caregivers, churches and community leaders on the importance of early childhood stimulation, reading with your young child, preschool participation, nutrition and health for improving the school readiness of children. In order to achieve this, the project will support:
 - (a) outreach campaigns through surveys and feedback from communities on attendance and barriers to access including differences relating to gender and disability;
 - (b) messaging through radio, community and church meetings;
 - (c) child protection and positive behavior management strategies for ECCE teachers and caregivers;
 - (d) messaging on inclusive education and disability screening of young children; and
 - (e) a “Read with your Child” campaign to encourage community support for a culture of reading.
12. **Public awareness activities** will be carried out through many channels and across all years and components of the project and will therefore require a dedicated team to undertake a scoping exercise to identify appropriate channels of communication, develop a comprehensive communications strategy and campaign materials, and ensure the messaging is consistent and effective in reaching the target audiences and gender sensitive. Public awareness activities under this sub-component will be led by the ECCE Unit in collaboration with the TRP Team and the MOHSWGA as required. The project will provide TA as required to support the team, including individual consultants and a social/marketing firm, development and production of campaign materials, and dissemination of messaging.
13. **Component 2: Improving Literacy Outcomes in all Schools (estimated costs US\$4.1 million equivalent).** Component 2 will support local language literacy in the early grades to improve reading, understanding and writing skills, and develop literacy activities for older students. A package of teaching and learning materials will be developed building on the materials already developed for Year 1 under the PEARL Program and provided to all classrooms in Years 1-3, and all teachers in Years 1-3 will be trained in the PEARL methodology for explicit instruction (scripted lessons) delivered daily in all primary schools across the country. The methodology follows the gradual release of responsibility model, also known as the “I do, We do, You do” model, which guides the teacher in delivering the lesson explicitly, by demonstrating the activity and guiding student practice before providing students with opportunity to practice the newly acquired skill, generalize their knowledge to new examples, and receive systematic feedback. Regular coaching of teachers and student feedback will be used to support teacher

⁴⁸ Such activities would be informed by the implementation of the Family Protection and Domestic Violence Act 2014 (FPDVA) and child protection legislation and policies (when finalized) in schools.



effectiveness. The ASET Program is currently supporting English language instruction in Years 1-8, which includes the transition from local language to English at Year 4 and plans to start a program in teaching numeracy in 2020. The bilingual dual language approach to reading requires consistent terminology and teaching methods in order to be mutually reinforcing and not cause confusion among teachers. This component will also support technology-enabled learning materials, teacher training and literacy enrichment activities to strengthen literacy beyond the early grades. An e-reader pilot will be piloted in the second year to significantly expand access to reading materials. Additional activities may be identified during implementation from the research and studies planned under sub-components 3.1 and 3.2.

14. *Sub-component 2.1: Implementation of the Tuvalu Reading Program (Years 1-3).* Under this sub-component, the project will: (a) develop and produce additional instructional learning materials for the Year 1 Tuvalu Reading Program (TRP) to those already developed under the PEARL Program, which may include classroom library books/readers, homework books, assessment books; (b) develop a package of instructional learning materials for the TRP for Years 2 and 3 including level-appropriate resources for teaching local language reading, pilot the lessons and materials in select schools, and revise as needed; (c) train all Year 1-3 teachers and coaches on the TRP for Years 1-3, and provide all Year 1-3 classrooms with the materials developed; and (d) provide coaching for teachers on a regular basis (at least once per term) to support their learning and understanding of teaching reading. Teachers will also be trained in the administration of pupil rapid assessment tests, a regular quick test by teachers and coaches to inform teachers where students' reading level is against the expected level so appropriate support can be provided. Activities under this component will be led by the TRP Team under the CDU. International TA will be provided by the Bank with funding from Australia through the Pacific Facility trust fund to support the development of materials, tools and training programs for coaches and teachers.
15. **Year 1 Tuvalu Reading Program scale up.** For the rollout of the Year 1 TRP during the first year of implementation, the printed resources for Terms 1 and 2 have already been printed with PEARL funding, with the Term 3 materials pending final review before printing. However, it has been agreed to roll out the Year 1 Program to Years 1 and 2 in 2021. Therefore, before rolling out the Year 1 TRP nationwide, materials for Term 3 plus an additional grade for Terms 1 to 3 will need printing. The project will finance: (i) printing of additional Year 1 TRP materials for all schools; (ii) training costs for teachers and school leaders in Funafuti, such as printing training materials, venue hire, and catering; (iii) travel costs for teachers and school leaders in the outer islands to travel to Funafuti; and (iv) cargo costs for shipping the TRP materials to schools on the outer islands.
16. **Years 1-3 Tuvalu Reading Program development and scale up.** Under the PEARL Program, development of Year 1 Reading Program materials included only teacher guides and student workbooks. Under TuLEP, additional resources will be developed for the Year 1 TRP to enhance children's opportunities to learn to read, which may include classroom library books/readers, homework books, and teacher assessment books. Development of instructional materials for the Year 2 TRP began in April 2020, and for Year 3 will begin in mid-2021. International TA will be provided by the Bank with funding from DFAT to support the TRP Team in the development of Years 1-3 instructional and learning materials, training and coaching programs. All other costs related to the development, piloting and scale up of the program for Years 1-3 will be funded by the project, including: (i) local consultants for developing the instructional and learning materials, and carrying out training to and coaching of teachers and classroom observations; (ii) purchasing office equipment and supplies for developing and producing instructional materials; (iii) teacher and school leader training costs; and (iv) travel costs for teachers to attend trainings and coaches to travel to schools. Retroactive financing will be made available to cover the costs of the development of the Year 2 TRP materials during project preparation pending confirmation that the procurement and financial management



procedures used are acceptable to the Bank. The Ministry will collaborate with the USP to include all training resources developed as an additional module to the pre-service teacher training curriculum to ensure institutionalization, cost-effectiveness and long-term sustainability. Teachers will receive two trainings each year. Teacher training arrangements would explore teacher rotation (or teachers moving with their grades each year) to embed more capacity across the three early grades and across different teachers to strengthen support for teachers implementing the TRP and fill the necessary gaps when teachers are absent.

17. **Coaching.** Coaching of teachers will take place through regular visits to schools by a team of coaches from the TRP Team who will observe reading classes, provide feedback to teachers, and model good teaching practices as needed. These coaches will also be trained to monitor non-discriminatory teaching approaches including gender sensitisation and to change their own attitudes and behaviours that reinforce and perpetuate gender inequality. Coaches will be trained by an international TA two to three times a year for the first three years, corresponding with implementation of the first year of the nationwide scale up of the reading program in each grade. The relationship between the coach and teacher is a supportive one, aimed at helping the teachers to improve their teaching practices by receiving constructive feedback, and reminding teachers what they learned during their in-service training. Coaches are expected to visit schools in Funafuti at least three times per term but will be required to travel to the outer islands once per term to ensure all teachers have the same opportunity to improve their teaching practice. Each coach will be assigned 3-4 teachers each year, and it is expected the same coach visits the same teachers each time to help develop the relationship and so the coach can track the progress of each teacher they are assigned. The project will cover the costs of travel to all schools in Funafuti and the outer islands. Where possible, video recordings and phone messages will be used as positive nudges or distance support to supplement coaching visits. All head teachers will receive centralized training in Funafuti at the beginning of each school year on the TRP. Beyond the TRP methodology, they will also be trained on the adapted TEACH lesson observation tool to improve school-led monitoring and accountability of the TRP.
18. *Sub-component 2.2: Strengthening literacy in all schools through teaching and learning innovations and enrichment activities.* This sub-component would encourage education technology innovations and other approaches to support teachers and students. At the school and teacher level, this includes: (a) aligning e-learning resources and e-learning library to the curriculum and context; (b) facilitating distance professional development and training of teachers in the outer islands; and (c) resourcing ICT Centers for schools. At the student level, this will include: (d) an e-reader pilot to expand the number of reading materials available to students in upper primary and secondary; and (e) additional learning enrichment activities including digital literacy, computer classes, digitized gamification of literacy concepts, phonics for emergent readers (P4ER) to support struggling students in higher grades, educational videos, and school clubs/sports. The sub-component would also support (f) training and engagement of teachers in the use of digitized resources and education technology interventions being introduced; and (g) installation and maintenance of satellite internet connectivity equipment and ongoing internet costs for schools through the duration of the Project. School leadership training, school-wide coaching and increased monitoring of outer islands would also be supported to take advantage of the improved connectivity to schools through ICT Centers and internet connectivity. In addition, the sub-component will support implementing recommendations and activities identified through the studies conducted under Component 3.1 of the Project, all selected in accordance with the criteria and procedures detailed in the Process and Procedures Manual. The ICT Unit and the Curriculum Development Unit (CDU) will be responsible for activities under this sub-component.
19. The government have initiated some of the e-learning activities but need support to implement or scale up. Work on the e-learning resources and e-learning library will be aligned with the curriculum review under sub-component



3.2. About five primary schools have ICT Centers and three more are equipped with portable tablet solutions, however, the equipment was procured in 2014 and is due for replacement. The project will support the government to establish ICT Centers in all schools and upgrade outdated equipment. This will include: (i) TA to identify the needs of existing and new centers; (ii) provision of equipment to resource the centers; and (iii) training for teachers and staff on use of the centers, basic computer literacy and cyber-safety. In addition, portable servers with digitized curriculum content will be distributed to select primary schools for automated uploading of content to computers and/or tablets. The project would explore X-prize winners (KitKit School and onebillion) that use adaptive learning software for gamified learning, in addition to companies that have already been approached to provide services for education technology in Tuvalu.

20. **An e-reader pilot** will be carried out under the project in the 2022 school year by providing select classrooms with a set of e-readers that will be pre-loaded with a selection of content , and also have the ability to add new content when connected to the internet or uploaded by a physical device, that will be made available by the GOT. This will give the government an opportunity to rapidly and cost-effectively expand the availability of reading materials, which are currently very limited in Tuvalu. The e-readers would be accompanied by a guide recommending age-appropriate reading materials for students. Further, e-readers have the potential to build learners’ vocabulary with dictionary and thesaurus functionality, improve their pronunciation with the inclusion of audiobooks, and provide an alternative way of accessing reading materials that may motivate reluctant readers to take the first step to lifelong reading. There is a wide selection of reading materials in English language already in an appropriate format for use on e-readers that will be selected by a team within the Education Department with technical assistance and pre-loaded onto the devices. In addition, several readers in *Gana Tuvalu*, either pre-existing or that will be developed under the project under sub-component 2.1, will be converted into an appropriate format and loaded on the e-readers prior to distribution to pilot classrooms. Teachers will receive training on how to: use the e-readers, incorporate reading time into lessons or other areas of the weekly timetable, teach students to use the e-readers, and how to take care of, store and charge the e-readers. Training will be included in regular in-service training programs for teachers. Effectiveness of the pilot will be assessed by the government, and adjustments made as needed prior to scaling up to all primary and secondary classrooms from 2023.
21. The project will cover the e-reader program costs, including: (a) procurement of e-readers and portable charging devices if required; (b) TA to support the selection of English language content and development of *Gana Tuvalu* readers for use on e-readers; (c) training for teachers on using e-readers;⁴⁹ and (d) evaluation of the e-reader pilot and adjustments to inform scale up.
22. The P4ER Program will provide Years 4 to 6 teachers with instructional material to help students with significant delays in basic literacy skills. The material will be modelled after the TRP and focus on teaching basic decoding and fluency skills in *Gana Tuvalu*. P4ER will provide daily 30-minute scripted lessons for a term, in the form of an accelerated version of the TRP. Teachers will be trained in implementing the program in their classrooms and will receive coaching support during their termly visit. The material will be developed and piloted in Funafuti during the 2024 school year. The program will be implemented in all Year 4 to 6 Tuvaluan classrooms in 2025.

⁴⁹ An action plan on the e-reader pilot will be developed to consider the type of device suitable for the Tuvaluan context, the ability to use solar charging, and potential for customization of content. The plan would also detail the guidance for their use, maintenance and replacement. It would also include the guide for students and teachers.



23. Due to the difficulties of reaching the outer islands on a regular basis to conduct support visits, monitoring etc., technological options will be investigated to increase the frequency of communication between coaches and teachers on the outer islands. This may include providing smart mobile devices or tablets to teachers and coaches with functionality to communicate via the internet, and apps to facilitate improved monitoring and resource sharing. Such communications will require a relatively stable internet connection, currently only provided on the outer islands by satellite through Tuvalu Telecommunications Corporation, which provides very limited bandwidth and comes with very high costs. The government is looking into a more reliable and affordable satellite connection to the outer islands, which the project will support through installation and maintenance of equipment, and ongoing service costs for the duration of the project. The World Bank is also supporting an internet cable project, which is expected to provide improved internet to the outer islands by the later years of the project. Such connectivity will be important for Tuvalu to enable remote learning activities that will be developed to respond to COVID-19 emergency restrictions and other emergencies (e.g., cyclones, Dengue Fever closures).
24. School leadership training, school-wide coaching and increased monitoring of outer islands would be supported as well as improved connectivity to schools through ICT. The government is planning to provide internet connectivity to all schools across the country, which the project will support through the installation and maintenance of satellite equipment, and ongoing internet costs for schools for the duration of the project. This will also support many of the ICT initiatives being developed and supported by the project, with the aim of reducing the need for regular travel for training, coaching, monitoring, data collection, communications etc., and also assist Tuvaluan students develop 21st century digital technology skills. The project will also support the government to address safety issues around accessing the internet, such as firewall protection for devices, and training for teachers, students and families on cyber-bullying, cyber-crime and other cyber threats.
25. Enrichment activities will also include activities to keep students engaged in learning, attending school and developing skills. These school level activities could include, but are not limited to, school clubs, sports, school newspaper, technology clubs, educational gaming, etc.
26. This sub-component will be carried out by the ICT Unit, the CDU and the School Supervisory Unit (SSU). The ICT Unit will provide technical support and training on the various technologies used, while the CDU and SSU will organize relevant trainings and incorporate e-readers into the curricula.
27. **Component 3: Research, Learning Assessment and Policy Review (estimated costs US\$3.6 million equivalent).** This component will provide resources to strengthen the evidence base of what works in improving learning in Tuvalu through: (a) strategic research, surveys and analysis to fill knowledge gaps and inform further interventions supported under the project or with government or other development partner resources; (b) strengthening the policy framework for education through key policy reviews and operationalization of newly adopted policies; and (c) measurements of school readiness and student learning to strengthen the availability of data and ability of the government to understand and use the data, and disseminate it to relevant stakeholders. Activities under this sub-component will be supported by international and local TA, including regional institutions, as needed. Local TA will include a M&E Officer, who will be embedded within the Education Department to coordinate these activities. Considering the size of the population and strong local familial connections, data protections in terms of privacy are paramount. Data captured will only relate to the general health, development and educational outcomes of children/students and will not be of a sensitive nature. Appropriate standard consent procedures will be followed. Data collected for research, monitoring and evaluation purposes will not be used at the individual level and where not already established, data handling procedures will be developed to ensure standard data separation principles



are adhered to (i.e. the storage of identifiers separately to content data with the use of codes and IDs). Any new data collections should be either linked into TEMIS or use the same ID system as TEMIS to maximize the research potential of the data collected, while also minimizing risks associated with identification of individuals (be that children/students or teachers). In addition, teacher training on cyber security and data protection will also be supported.

28. *Sub-component 3.1: Strategic research, surveys and analysis.* The lack of data and information available to inform government, community and development partner decisions around investments and priorities in education requires attention to ensure future decisions are based on evidence, including investments under the TuLEP. The knowledge gaps the project will make efforts to fill will be through: (a) a study on teacher and student absenteeism; (b) a gender analysis of enrolment and retention to understand why boys are dropping out of school in greater numbers than girls, and why boys are underperforming compared to girls, to inform government decisions, some of which could be supported by the project (under sub-component 2.2), to improve educational outcomes for boys; (c) a workforce planning exercise to inform improved management of the MEYS staff; and (d) a time-on-task study to provide the MEYS with information on how much time is actually spent on children's learning. The project will fund the TA required for activities under this sub-component, workshop and travel costs required for collection of data and information, and costs of dissemination of results and key messages. Additional activities recommended from the studies could be supported under sub-component 2.2. The absenteeism study, gender gap analysis and interventions, and time-on-task study will be led by the SSU with support from the ICT Unit, while the Workforce planning exercise will be led by the Office of the Director of Education (DOE).
29. **Absenteeism study.** The absenteeism study will first identify the extent of the problem in schools, which is not currently routinely recorded or monitored centrally, and second attempt to understand the reasons for absenteeism, which will help inform government decisions, some of which could be supported by the project, to reduce teacher and student absenteeism rates. The ASET Program has hired a consultant to work with the ICT Unit to incorporate attendance data into TEMIS. The project will support training to teachers and school leaders on collecting and keeping attendance records, and costs related to data collection for central recording and analyzing, which will help to inform the first step of the absenteeism study. Also tracking student movements between schools, enrolled in TVSD, and moving or travelling overseas will be an important aspect of the study, as this impacts the reliability of the attendance data collected at the school level. The second aspect of the study, understanding the reasons for absenteeism, will be partly drawn from the attendance data, which would also record reasons for absenteeism if known by teachers or school leaders, as well as a series of community dialogues and teacher and student surveys. The results of the study will help develop a set of recommendations on interventions to reduce absenteeism of students and teachers. Some could be supported by the project under sub-component 2.2, including awareness raising activities. It is also expected that increasing the availability of a wide range of reading materials (including topics of interest for all readers) to foster an improved level of reading for all students will lead to improved academic performance at school, and increased interest in staying in school.
30. **Addressing the Gender Gap.** An initial gender analysis was carried out during project preparation to try to better understand the large disparity in school attendance and academic performance between boys and girls. Further consultations and stakeholder discussions will be supported under the project to dig deeper into what is causing this larger-than-expected disparity, and to identify possible interventions the government could implement to reduce this gap. While there is a need to understand the underperformance of boys, the gender analysis will also consider barriers and enablers to girls' enrolment, attendance and achievement in education. Information will also be collected to understand and address the causes of gender disparities in enrolment, attendance and achievement



in education for girls and boys with disability as well as the impact that care responsibilities have on girls' and boys' education. The analysis will also seek to understand girls' and boys' experience and exposure to violence, the gendered dimensions of different forms of violence and the impact this has on their education. This will include exploring the experience and impacts on girls' and boys' experience of domestic violence, sexual harassment, bullying and other forms of GBV. Some of the interventions identified could be supported by the project under sub-component 2.2, including: (i) increasing the availability and range of reading materials to foster an interest in reading and learning for all children; and (ii) provide recommendations to curricula revisions that include topics, activities and teaching modalities intended to appeal to a wider array of student interests. Other development partners are also supporting other work in this area, including ASET Program support for Positive Behavior Management (PBM) Training for teachers and school leaders. The project could extend this beyond the work supported by the ASET Program and include aspects of PBM in community awareness campaigns targeting parents and caregivers.

31. **Workforce Planning.** Workforce planning is an important function of any workplace, and in Tuvalu, it is even more critical due to the small population, which means there are fewer people trained on each job, leading to greater disconnect and loss of productivity when a person goes on study or medical leave. This is felt greatest in management positions, including school leadership, as institutional knowledge of schools and institutions is largely retained in one person's head and not documented or transferred to other people. A workforce planning exercise will be carried out under the project by working with the Human Resources Management Department to review current and anticipated future workforce needs of the Ministry, the Education Department, and in schools, look at current succession planning processes, and develop a model that will ensure there are minimal gaps when staff go on leave unexpectedly or with short notice.
32. **Time-on-Task Study.** To develop recommendations for the MEYS on how to increase the number of hours students are actively learning and engaging in stimulating activities, the project will support a time-on-task study, adding to the evidence produced in a discussion paper developed by the ASET Program⁵⁰. The study will involve classroom observations to better understand how teachers are spending contact hours with students in the classroom across the school day. This will help to understand how much time in total is being spent each week, term and year on learning, and provide insights into what can be done to increase the time available for learning without adding costs (or by adding minimal costs) to the government's recurrent budget. The project could support implementation of some of the recommendations under sub-component 2.2, such as training modules for school leaders and teachers on increasing time-on-task during school hours. The study could extend to all levels of education from ECCE through to secondary.
33. *Sub-component 3.2: Strengthening the education policy framework.* The MEYS currently has very few policies to inform the activities it carries out and the responsibilities under its mandate. The project will support activities to: (a) develop recommendations to improve health and nutrition of preschool- and school-aged children, incorporating findings from the 2019 MICS carried out by UNICEF on likely contributors to stunting and undernutrition in Tuvalu, and where possible provide support towards implementation of select recommendations; (b) carry out a curriculum review and develop comprehensive Goals and Objectives for curricula from Years 1-13 to inform the government's plans for an overhaul of the primary and secondary schooling curricula; (c) strengthen school leader and teacher quality framework; (d) support implementation of the disability and inclusive education plan being developed with support from the ASET Program; (e) share TEMIS data with schools and communities, aligned with the ASET Program; (f) host two iterations of the National Conference of the Child (2021 and 2024), to consider evidence and priorities for ECCE strengthening, and multisectoral collaboration, particularly across MOES, MOHSWGGA and MLGA.

⁵⁰ ASET Program, Discussion Paper: Teaching English Literacy in the Classroom: Allocation of Time, 2019.



Arrangements to ensure the protection and appropriate collection, use, management, and storage of any personal data collected through the Project will be detailed in the Process and Procedures Manual.

34. **Health and nutrition.** Recommendations for improving health and nutrition of preschool- and school-aged children may include, but not be limited to policy reforms and/or development on food regulations, folate fortification, and sin taxes; setting up a school health promotion team within the Education Department with cross-sectoral support from MOHSWGA; informing public awareness campaigns and other health promotion services, including in health clinics, ECCE centers and schools. The project leverages information gained through the MICS being conducted in 2020, with support from UNICEF, to both confirm the stunting figures initially revealed by the 2016 TuEHCI census and provide some further insights into the potential root causes (breastfeeding rates, diarrhea, basic nutrition). The TuEHCI to be conducted in 2021 will be enhanced by additional questions not revealed by MICS, such as parental knowledge and barriers to providing ideal sanitation, hygiene and nutrition. Structural/systemic factors identified that could be ameliorated through change in government policy will be supported through technical assistance and capacity building, while also providing evidence to target active donors, such as the World Health Organization, for any additional financial/technical support required. Findings from this work would also guide continued project information and sensitization outreach activities. In addition, the work would include recommendations to strengthen school safety/hygiene and virus-prevention measures in light of the current COVID-19 emergency.
35. **Curriculum review.** The government has plans to revise the primary and secondary school curricula to ensure it is modern, aligned across grades and subjects, aligned with the Tuvalu National Curriculum Policy Framework (TNCPF), and appropriately resourced. Before this can be done, the project will support a review of the curricula for Years 1-13, which will include: a desk review to identify the gaps, weaknesses, strengths, structure, and alignment to the TNCPF, a learning resources audit and compiling a catalog, instructional time review (informed by the time-on-task study under sub-component 3.1), and teacher curriculum review workshops with teachers. The MEYS has already reviewed the TNCPF, which will be drawn on to inform the review. Using the results of the review, the project will develop a complete set of goals and objectives for curricula for Years 1-13 that is consistent across levels for all subjects of each grade. The project could support some of the recommendations coming out of the review to the extent time and resources permit. This could inform the development of an induction course on the revised curriculum to be integrated with pre-service teacher training. This activity will be led by the CDU, with the review of different grades phased through the project duration.
36. **Strengthen School Leader and Teacher Quality Framework.** As there are not currently school leader or teacher policies in place, the project will support the Education Department in its efforts to improve the quality of school leadership and teaching in the classroom through, inter alia, improvements in school leadership training and teacher training (pre-service and in-service), and implementation of school leader and teacher appraisals. Further, sub-component 2.1 supports coaching of teachers implementing the TRP in Years 1-3, which is expected to provide lessons to inform recommendations for coaching of teachers of other grades and subjects. This will include: (a) support to implementation of a Tuvalu teacher induction program for teachers returning from overseas pre-service teacher training; (b) integration of teacher training programs developed under the project into the government's in-service teacher trainings; (c) support to review as needed and implement the school leader and teacher appraisals developed by the government with support from EQAP; and (d) development of recommendations to inform government decisions on regular CPD for school leaders and teachers, which may include training on subject content knowledge, and coaching of teachers to reinforce their learning obtained through CPD. As teacher appraisals are likely to produce different training needs for different teachers, such as gaps in subject content knowledge for different subjects, activities under sub-component 2.2 providing distance professional development for teachers



would allow for more individualized training programs. The project could also coordinate with USP on their pre-service teacher training program to see if there is room to further improve the quality of the teacher qualifications. This will include providing: (i) international TA for reviewing current pre-service and in-service training modules and materials offered and providing recommendations to ensure alignment with the teaching profession's needs in Tuvalu; (ii) costs to carry out consultations with schools and communities; and (iii) training for all staff on school leader and teacher appraisals. The activity will be led by the SSU in collaboration with the CDU, and the Office of the Director of Education.

37. **Data sharing.** To improve the ability of school leaders, teachers, caregivers and communities to address the needs of students and schools in a timely manner using up-to-date information, the ASET Program is providing support to the ICT Unit in the Education Department. This includes reporting through online templates (e.g. Google sheets). The Ministry is working on digitized reporting through the Ministry website with technical support from SPC. The proposed project will further support the analysis and dissemination of data collected through TEMIS at the central and school level by generating automated system-level annual reports on key performance indicators as well as school overview reports, so that schools and communities can be provided relevant anonymized information with greater regularity than currently occurs. Teachers will also be trained on how to understand, anonymize, use, and protect the data, including dissemination of anonymized data to community members through school assemblies and public display of the school overview report. This activity will be led by the ICT Unit.
38. **The National Conference of the Child.** The government plans to hold the inaugural National Conference of the Child in 2021 to seek feedback on the evaluation of the TESP III (2016-2020), and inputs into TESP IV (2021-2026) from key stakeholders, including all teachers, school leaders, relevant ministries and agencies, and communities. A second conference would be held in 2024, but focused on mid-point evaluation of TESP IV and preparing for TESP V. The project will support costs for holding these events, including: (a) development and production of conference materials (b) venue hire and catering; and (c) travel costs for participants to attend the events from across Tuvalu. This activity will be led by the SSU and the Office of the Director of Education, with TA provided by UNICEF.
39. *Sub-component 3.3: Measurements of school readiness and student learning.* While many learning assessments are carried out in later grades in Tuvalu, learning outcomes can be improved by intervening early in a student's life, even before they start school. Under the PEARL Program, the MEYS carried out the Tuvalu Early Human Capability Index (TuEHCI)⁵¹ assessment in 2016 to measure the school readiness of preschool children across multiple domains of child development. The project will support another two iterations of the TuEHCI to provide the government with data to monitor progress on its efforts to improve school readiness outcomes, and to determine the effectiveness of project interventions carried out under Component 1. Also, under PEARL, the MEYS carried out the Tuvalu Early Grade Reading Assessment (TuEGRA)⁵² in 2016 to measure reading skills of children in Grades 1-3. The project will support another three iterations of the TuEGRA to monitor children's reading development in the early grades, which has a significant impact on their learning outcomes later in school and determine the effectiveness of project interventions carried out under Component 2. Support for these surveys under the project will include: (i) International TA to develop/adjust the instruments, pilot, clean and analyze data, and produce reports and other

⁵¹ The TuEHCI is conducted as a census survey every two years with data collected from caretakers and teachers on all children aged 3 to 5 years. It collects data on nine developmental domains from which an overall development score is derived ranging from zero to one. In addition, the survey collects data on child health and nutrition, preschool participation and home stimulation. The last TuEHCI survey was conducted in 2016.

⁵² The TuEGRA is conducted as a census survey to all 10 primary schools, covering Years 1 to 3. The tool consists of six reading skills tests, listening comprehension and dictation. A reading fluency benchmark will be set at 50 correct words per minute. The last TuEGRA survey was conducted in 2016.



dissemination materials; (ii) training enumerators to carry out the surveys; and (iii) data collection costs, including supervisor and enumerator travel. The project would further support the review of lesson observation tools (MELE and TEACH) for the Tuvaluan context to guide teacher coaching and mentoring at the ECCE and lower primary levels and provide regular feedback to teachers. Activities under this sub-component will be led by the Assessment and Examinations Unit in collaboration with the SSU. The project will look into strengthening relationships with regional institutions such as EQAP in carrying out these activities, which adds a level of capacity to the MEYS and increases likelihood of sustainability after the project.

40. **Lesson Observation and school readiness measurement.** The MELE is an instrument that pairs well with the TuEHCI (Tuvaluan Early Human Capability Index), where the MELE would measure the quality of the early learning environments (more specifically, the quality of the CPBAs and Pre-schools) and the TuEHCI measures the developmental outcomes of the children. Taken together they can determine how different aspects of quality in the early childhood education setting are impacting different aspects of development. Similar to MELE, TEACH also measures what happens in the classroom, but is targeted to school rather than early childhood education settings. Both MELE and TEACH measures the teacher's ability to support student understanding and their methods to prompt critical thought and analysis. TEACH measures both the time spent on learning and the quality of teaching practices with a focus on the teachers support of social and emotional skill development. Recently the World Bank has been working to combine aspects of TEACH into MELE. A combined version of MELE and TEACH considering the aims of TuLEP would help to support the monitoring and evaluation of the program elements. This information linked with child outcome measures (TuEHCI and TuEGRA) will inform continuous improvement and feedback loops to teachers, education leaders and the system more broadly. Technical support will be provided to adapt aspects of MELE and TEACH into a Tuvaluan quality measure that is relevant to context and culture. Consistent with other aspects of TuLEP, trained Head Teachers will be the ones to conduct lesson observations at least once a year. For efficiency purposes, the scheduling of these observations should align with those conducted for the early reading coaching, to enable strengthened monitoring accountability of both the TRP and coaching visits.
41. The technical expertise required to design the TuEHCI and TuEGRA instruments, pilot, implement the surveys, and clean and analyze the data, does not exist in the MEYS, and it would be difficult to develop and retain this expertise due to the low staff numbers and high turnover of staff. Therefore, the project will seek support from external partners, such as the EQAP who have previously worked with Tuvalu on these surveys, to work alongside the MEYS in developing, carrying out, and analyzing the surveys, and disseminating survey results. Tuvalu has also participated in three iterations of the Pacific Islands Literacy and Numeracy Assessment (PILNA)⁵³, measuring progress towards achieving literacy and numeracy benchmarks in Grades 4 and 6. The MEYS intends to continue to participate in future iterations, expectedly in 2021 and 2024. While the survey is led and supported by EQAP, who also provide support in analyzing the data, the project will provide additional support in how to effectively use the data and disseminate findings.
42. **Component 4: Strengthening institutional capacity, monitoring and evaluation, and education sector management (estimated costs US\$4.5 million equivalent).** This component will provide overall support to the other three components and help ensure the activities are sustainable beyond the life of the project, including M&E, training, management, and operations related to project activities. The component will also fund a CPMO that will provide support to the preparation and implementation of all new World Bank-financed and co-financed projects in Tuvalu, including TuLEP.

⁵³ The PILNA is a regional numeracy and literacy assessment administered to students in Years 4 and 6 across 15 Pacific island countries. Students are assessed against regional benchmarks. Tuvalu participated in the assessment in 2012, 2015 and 2018.



43. *Sub-component 4.1: Project Management Support (estimated costs US\$1.5 million equivalent):* This sub-component will provide technical and operational assistance to the MEYS on the management, implementation, monitoring and evaluation of the Project. This will include funding a TuLEP Project Coordinator and Deputy Coordinator, project accountant, procurement officer and M&E activities conducted at the headquarters, island and community level, as well as operational costs. In addition, the project will support an evaluation of project interventions on learning outcomes. The TuLEP Project Coordinator and Deputy Project Coordinator will be recruited within three months of the effective date of the Financing Agreement.
44. *Sub-component 4.2: Central Project Management Office (estimated costs US\$3 million equivalent):* This sub-component will support the establishment and operation of a CPMO within the MOF to strengthen the capacity of Government of Tuvalu to provide implementation support to this Project and other World Bank-financed or co-financed operations. The CPMO may support other donor funded projects in future. The key objectives of the CPMO are to reduce duplication of international consultants in common project management functions, improve sustainability and coordination of project management arrangements in Tuvalu and build capacity in areas in which specialist expertise may not yet be readily available within government.
45. The CPMO will report to the Permanent Secretary of the MOF and be overseen by the National Project Steering Committee. It will comprise international and national staff in project management, procurement, financial management, safeguards and monitoring & evaluation. Consideration will be given to recruiting an international firm that will be responsible for recruiting, deploying, and coordinating the international specialist expertise required to form the CPMO. MOF will be responsible for the overall performance of the CPMO and to ensure that the CPMO is established within three months of the effective date of the Financing Agreement. MOF, with support from the World Bank, will develop detailed standard operating procedures within three months of the effective date of the project, including service standards for operation of the CPMO.
46. The international staff would be composed of qualified specialists in project management, procurement, FM, safeguards and M&E. International experts would provide in-country and remote support on a part time basis. In their respective areas of expertise, the internationally qualified specialists may be responsible for: providing expert advice; establishing systems; supervision of technical staff and consultants; quality assurance of inputs and outputs; leading complex activities; and mentoring/capacity building of government, project staff and national consultants. A procurement advisor will be recruited to the CPMO within three months of the effective date of the Financing Agreement.
47. In addition, this component will finance several national personnel to be based full time in Tuvalu including:
- CPMO Director responsible for: overall coordination of the CPMO's activities in consultation with the implementing agencies and MOF; day-to-day supervision of CPMO staff; coordination and communication with WB task teams.
 - Deputy CPMO Director responsible for: Assisting the Director in all duties above.
 - M&E Specialist responsible for: implementing and maintaining management information systems (MIS); coordinating and/or preparing project reports for government, development partners and other stakeholders; coordinating communications and outreach.
 - M&E Officer responsible for: monitoring and evaluation activities in outer islands.
 - Financial Management Specialist: responsible for establishing and ensuring project accounting and financial management systems are aligned with government and donor requirements, financial reporting for all projects.



- Finance Officer: day-to-day financial transactions and accounting.
 - Safeguards officers/Community Liaison Officers able to provide local support to implementing agencies in areas such as: stakeholder engagement; implementation of environmental and social safeguards plans; managing incidents; and reporting.
48. With IDA financing, the WB will support the staffing and operating costs of the CPMO for the full implementation period of the Tuvalu Learning Project. Once the project closes, the CPMO may be transferred to and embedded in another IDA-financed project. Additional project specific coordinators and technical specialists will be financed separately by projects as necessary. Noting however that the Project will not Finance civil servant salaries and that all national personnel will be engaged as individual consultants on contracts with terms and conditions aligned with equivalent positions within the Tuvaluan public service.

Gender and Inclusion

49. The following planned activities aim to address fundamental issues around inclusivity, gender and school safety:
- a) **ECCE teacher and parent sensitization on child well-being, nutrition, child protection and inclusive education.** Information campaigns will sensitize communities, churches and parents on the importance of early childhood stimulation, health, nutrition, child protection, climate health impacts and education, including inclusive education. This sensitization will engage communities to support the education of girls and boys from a gender equality perspective that moves away from teaching about and expecting girls and boys to take on harmful stereotypical roles, subjects, skills, responsibilities and opportunities that reinforce and perpetuate gender inequality. The parent groups are primarily directed at mothers, but this reinforces women's role as the primary caregiver and in doing so does not challenge men's existing roles, thus perpetuating rather than challenging this gender norm. Fathers and male caregivers will be actively engaged in parent sensitisation activities. While father's engagement in parents' groups is important, support to parent groups will still provide women's only spaces and messages in some sex-disaggregated activities so that the benefits of women's only spaces are not lost.
 - b) **Teacher training:** The teacher training provided under Component 1 includes in-service modules on gender, including understanding and responding to the different needs of girl and boy students, removing harmful stereotypes from teaching methods and materials while ensuring that teaching methods and materials do not reinforce harmful gender stereotypes or norms. Promoting gender equality and non-traditional roles for girls / women and boys / men and addressing the unconscious bias of teachers and principals towards girl and boy students and their capacity to provide non-discriminatory teaching. Teacher training will also include child protection and positive behaviour management strategies, and disability inclusiveness, intended to help address issues related to exclusion, sexual-based violence, among others. Training on disability screening and nutrition will also help ensure more comprehensive approaches to child development.
 - c) **Analysis of gender stereotyping and skewed gender perceptions in teacher behavior through the lesson observation tool.** Making use of the lesson observation tool to include measurement of use of language, active engagement of both boys and girls and classroom resources that reinforces gender stereotypes. In order to use the lesson observation tool to monitor non-discriminatory teaching approaches those using the tool will need to undergo training on gender sensitisation and to change their own attitudes and behaviours that reinforce and perpetuate gender inequality.
 - d) **Gender disaggregation of PDO-level indicators on student outcomes.** PDO indicators on student school readiness and performance on literacy assessments have been disaggregated by gender. **Number of**



students directly benefiting from interventions to enhance learning and student attendance would also be disaggregated by gender. The project will also support the Education Department to continue to collect sex-disaggregated quantitative data and to use this data to inform program development, implementation and monitoring as well as share data and analysis with other government agencies and stakeholders working towards gender equality. An intermediate results indicator on the gender gap in percentage of Year 3 students with zero scores in reading fluency is also being tracked.

- e) **In-depth gender analysis to understand and address the causes of gender disparities in enrolment, attendance and achievement in education.** While there is a need to understand the underperformance of boys, such research will also consider barriers and enablers to girls' enrolment, attendance and achievement in education. This will also collect information to understand and address the causes of gender disparities in enrolment, attendance and achievement in education for girls and boys with disability as well as the impact that care responsibilities have on girls' and boys' education. The analysis will also seek to understand girls and boys experience and exposure to violence, the gendered dimensions of different forms of violence and the impact this has on their education. This will include exploring the experience and impacts on girls and boys experience of domestic violence, sexual harassment, bullying and other forms of GBV. The Education Department, with support from Australian Support to Education in Tuvalu (ASET), is conducting a gender review of all primary and secondary schools. These findings can be used to identify further areas of support. It will also be explored whether the gender review can be conducted in ECCE centres.
- f) **Inclusive Education:** The ASET Program is currently financing technical assistance to support the Government to develop well-coordinated and accessible inclusive education as part of its contribution to improve systems and functions in the Tuvalu Education Department. A Gender Equality and Social Inclusion Plan has already been developed to focus on designing capacity building and training modules, sensitization and outreach to communities and schools; and data collection/analysis of students with disabilities and special needs. The TuLEP would support the roll out of the training and further operationalization of the inclusive education policy. It will also be explored whether the inclusive education review can be conducted in ECCE centres. Findings from the evaluation of the special education classroom pilot in Nauti Primary School will be reviewed to identify successes that could be rolled out to other schools. TuLEP will complement inclusive education initiatives of the ASET Program by: (i) including screening for hearing and vision during the nurse visits to ECCE centres; and (ii) extending training of teachers in inclusive education including training more ECCE and primary teachers using courses offered locally to support teachers to obtain the full qualification.
- g) **Provisions for the assessment of students with special education needs** will be considered in the roll out for the literacy assessments (e.g., TuEGRA and PILNA).
- h) **Provision of teaching and learning materials for students with special education** needs related to improving their participation in ECCE and early grade literacy activities.
- i) **Improved data collection on students with special education needs for enhanced resource allocation and planning.** The TEMIS will aim to routinely collect data on students with disabilities. The annual school survey would include questions on enrolment, type of learning disability, and attendance of students with special education needs.
- j) **Support existing work to establish and implement child protection mechanisms while integrating school responses to GBV** by:
 - (i) including training for teachers to change their own attitudes and behaviours that reinforce and perpetuate gender inequality and GBV before they are expected to do any work or awareness on GBV;



- (ii) including awareness on domestic violence, the Family Protection and Domestic Violence Act 2014 and how to access support services in training with teachers, principals and the Education Department and during community awareness and outreach;
- (iii) including training on the child protection specific legislation and school child protection policy (once finalised) including mandatory reporting requirements and mechanisms for schools to respond when child protection issues arise in training with teachers, principals and the Education Department and during community awareness and outreach;
- (iv) considering having a counsellor travel with teams conducting teacher training and community awareness and outreach to provide counselling and referrals to women in situ noting that counsellors in Tuvalu are limited and have existing full-time roles and there are staff in the Education Department who have been trained as counsellors who may be engaged here; and
- (v) including awareness with students, with child appropriate messages, about domestic violence and where they can go for help.



ANNEX 3: Economic and Financial Analysis

1. **Justification of public financing.** Economic justification of public financing of pre-primary and primary education is the inability of households to borrow against the future earnings of their children. Despite strong evidence of high private returns to education in terms of higher future earnings, credit constraints prevent individuals or households from borrowing against these future earnings to finance early interventions. This credit constraint is the market failure which justifies public investment in education in general and applies to the interventions financed by this project as well.
2. **World Bank's value-add.** The World Bank's value-add is its experience and expertise in evaluating and implementing playgroups, early grade reading interventions, and various research and capacity activities in the Pacific and Tuvalu specifically. Activities financed under components 1 and 2 are the product of previous technical assistance provided by the Bank to Tuvalu through the PEARL Program.
3. **The loss of human capital in Tuvalu is driven by poor learning outcomes.** The Human Capital Index (HCI) in Tuvalu is 0.55,⁵⁴ lower than the average for its region and income group. This low HCI indicates that 45 percent of productivity is lost for a child born today. Probability of survival to age 5 is 98 percent and rate of healthy growth (not-stunting) is 90 percent. While the expected years of schooling is 11.9 years, learning adjusted years of schools is only 7.4 years. This implies that children are in school but not learning for 4.5 years. Conditional on initial GDP per capita and years of schooling, economic growth is vastly explained by the quality of education, measured by scores in tests of cognitive skills,⁵⁵ or the quality of education is substantially more important for economic growth than just the quantity of education.⁵⁶
4. **Expected development impact.** Component 1 and Component 2 improve the quality of service delivery ultimately improving human capital and productivity and are the focus of the cost-benefit analysis. While the effects of these components on human capital and future earnings is not known *ex ante*, the range of effects on cognitive skills of similar interventions globally provide a range or distribution of effect sizes to be expected from the project. In turn, this range of effect sizes provides a range or distribution of internal rates of return (IRRs). The estimated modeled IRR for these components is 12.77 percent and its distribution has a standard deviation of 2.68 percent. In terms of fiscal sustainability, the estimated cost per year of maintaining the new activities created by the project represent 5.1 percent of the MEYS recurrent budget. The costs per year of maintaining Component 1 and Component 2 represent, respectively, are 16.4 percent of the ECCE budget and 16.9 percent of the primary budget.

Current evidence on the effectiveness of key interventions

5. **Early Childhood Education (ECE) program attendance not only prepares children for primary school but also impacts education outcomes in later years.** Computations by UNICEF, using MICS and Demographic Health Survey data from 48 countries, showed that 44 percent of children who attend ECE programs are on track in literacy and

⁵⁴ World Bank. 2018. Human Capital Index Two Pager – Tuvalu.

⁵⁵ Bashir, Sajitha, Marlaine Lockheed, Elizabeth Ninan, and Jee-Peng Tan. 2018. *Facing Forward: Schooling for Learning in Africa*. Africa Development Forum series. Washington, DC: World Bank.

⁵⁶ Hanushek, Eric A., and Ludger Woessman. 2007. *The Role of Education Policy for Economic Growth*. Policy Research Working Paper, No. 4122. Washington, DC: World Bank.



numeracy skills, compared to only 12 percent of those who did not attend ECE programs.⁵⁷ Data from PISA found that after controlling for socioeconomic differences, for a cohort of 15-year-olds in school, those who attended preschool scored a year ahead of their peers.⁵⁸ A study in Kenya and Tanzania found that although those who attend preschool enroll in primary school late, once in school they progress faster and between the ages of 13 and 16 have completed one-and-a-half months more than their peers who did not attend preschool while also scoring higher on cognitive tests.⁵⁹

6. **Quality ECE programs are supported by availability of quality, age-appropriate reading materials.** This problem is exacerbated in countries like Tuvalu where with a population of only about 11,000 people, there are insufficient qualified authors and publishers working in the local language. Another problem is the insufficient or inappropriate use of book procurement and distribution systems, which increases the costs of provision. In Guinea, Niger, and Chad, over 50 percent of the books that are printed are lost in warehousing, transport, and distribution due to lack of oversight, accountability, and planning.⁶⁰ In Tuvalu, large distances between the outer islands and the associated difficulties with accessing them lead to increased transportation costs of reading materials.
7. **Instruction in the local language is important as children gain reading proficiency in the early years.** Students learn better and are less likely to drop out if they are taught to read in a language they speak at home. Effects appear to persist over a lifetime, with higher average earnings accruing to students who began their schooling in their home language. Using the home language to instruct students for the early years of schooling is an important factor to establish reading competency, and to provide the foundation to study more complex topics. Data from Trends in International Mathematics and Science Study (TIMSS) have shown that, with few exceptions, in countries with large proportions of students from homes where the language of instruction is not the language spoken at home, math achievement is lower. Internationally, 4th graders who were not taught in their home language had average scores 28 points lower on TIMSS 2011 than 4th graders who were taught in their home language (477 versus 501).⁶¹
8. **Interventions that target family and community support are effective in influencing a child's readiness to learn and are often low cost.** For instance, in Mongolia, mobile libraries allowed parents to borrow educational kits (storybooks, toys, digital tools, and listening resources) which parents used for two to three weeks before receiving another; children enrolled in the program demonstrated higher cognitive and non-cognitive skills than those who were not.⁶² In Zanzibar, children gather in a community space to listen to a preschool program (including song, stories and physical activities) delivered by radio several mornings a week, while a community facilitator is guided by the program; this has been in place for more than ten years making the annual cost per child as low as US\$5-30 depending on scale. In Indonesia, community block-grants that allow for community-based playgroups have reached 800,000 children with costs per child per year as low as US\$30; there has been a sustained impact on child development especially for the most disadvantaged children, and benefit-cost ratios have ranged from 1.3 to 4.3.⁶³

⁵⁷ UNICEF. 2019. *A World Ready to Learn: Prioritizing Quality Early Childhood Education*. New York: UNICEF.

⁵⁸ World Bank. 2018. *Growing Smarter: Learning and Equitable Development in East Asia and Pacific*. World Bank East Asia and Pacific Regional Report. Washington, DC: World Bank.

⁵⁹ Bietenbeck, Jan, Sanna Ericsson, and Fredrick M. Wamalwa. 2017. *Preschool Attendance, School Progression, and Cognitive Skills in East Africa*.

⁶⁰ World Bank. 2019. *Ending Learning Poverty: What will it take?*

⁶¹ World Bank. 2019. *Ending Learning Poverty: What will it take?*

⁶² World Bank. 2018. *Growing Smarter: Learning and Equitable Development in East Asia and Pacific*. World Bank East Asia and Pacific Regional Report. Washington, DC: World Bank.

⁶³ World Bank. 2018. *Learning During the Early Years*. Washington, DC: World Bank.



In rural Ghana, community-run low cost play schemes implemented through Lively Minds had positive impacts on children’s cognition and school readiness, with improvements in pre-numeracy, pre-literacy, and fine motor skills. The program also improved children’s socio-emotional development, in particular reducing children’s externalizing behaviors (conduct problems and hyperactivity). Children in program schools also saw health improvements indicated by an increase in average upper arm circumference.⁶⁴ In Jamaica, a parenting program that provided tutoring to mothers of malnourished children on play-based stimulation, resulted in better educational attainment, improved behavior and a 25 percent increase in earnings in adult life.⁶⁵

- 9. **Playgroups.** Component 1 supports the establishment of playgroups at ECCE centres. Evidence on the effectiveness of playgroups as a method to improve parenting practices for early stimulation is limited but growing (Table A3.1). In Australia, playgroups have been found to improve the support that mothers receive through social networks⁶⁶ and to reduce development vulnerabilities by half⁶⁷. In Indonesia, playgroups followed by kindergarten increased test scores in primary school by 0.42-0.43 standard deviations⁶⁸. In Tonga, a randomized-controlled trial found that supporting communities to establish playgroups increased literacy and numeracy domains of school readiness by 0.17 and 0.19 SD among disadvantaged boys and girls in treatment communities⁶⁹. The positive effects of playgroups on child development outcomes are consistent with evaluations of group-based approaches more broadly including approaches to promote parenting practices for nutrition.^{70,71}

Table A3.1. Effects of similar interventions internationally

Study	Evaluation method	Countries	Effect on cognitive skills
Playgroups			
Hancock et al. 2015	longitudinal study	Australia	Increased network / social support for mothers
Nakajima et al. 2016	regression model	Indonesia	Playgroups followed by kindergarten increased primary school test scores by 0.42-0.43 SD
Gregory et al. 2016	regression model	Australia	Reduced developmental vulnerabilities by half

⁶⁴ IPA. 2018. *The effects of a play-based preschool learning program in rural Ghana – Study Summary.*

⁶⁵ Gertler, P., Heckman, J., Pinto, R., Zanolini, A., Vermeerch, C., Walker, S., Chang, S. M., and S. Grantham-McGregor. 2014. “Labor Market Returns to an Early Childhood Stimulation Intervention in Jamaica.” *Science (New York, N.Y.)* 344 (6187): 998–1001.

⁶⁶ Hancock KJ, Cunningham NK, Lawrence D, Zarb D, Zubrick SR (2015) Playgroup Participation and Social Support Outcomes for Mothers of Young Children: A Longitudinal Cohort Study. *PLoS ONE* 10(7): e0133007.

⁶⁷ Gregory, T., Harman-Smith, Y., Sincovich, A., Wilson, A., & Brinkman, S. (2016). *It takes a village to raise a child: The influence and impact of playgroups across Australia.* Telethon Kids Institute, South Australia. ISBN 978-0-9876002-4-0

⁶⁸ Nakajima, N., Hasan, A., Jung H., Brinkman S., Pradhan M., Kinnell A. (2016) *Investing in School Readiness: An analysis of the Cost Effectiveness of Early Childhood Education Pathways in Rural Indonesia.* World Bank Policy Research Working Paper Series No. 7832.

⁶⁹ Macdonald, Kevin Alan David; Brinkman, Sally Anne; Jarvie, Wendy; Machuca-Sierra, Myrna; Mcdonall, Kristen Andrew; Messaoud-Galusi, Souhila; Tapueluelu, Siosiana; Vu, Binh Thanh. 2018. *Intervening at Home and Then at School: A Randomized Evaluation of Two Approaches to Improve Early Educational Outcomes in Tonga (English).* Policy Research working paper; no. WPS 8682. Washington, D.C.: World Bank Group.

⁷⁰ O’Rourke, K., L. Howard-Grabman, and G. Seoane (1998). *Impact of Community Organization of women in Perinatal Outcomes in Rural Bolivia.* *American Journal of Public Health.* 3 (1): 9-14

⁷¹ Prost, A., T. Colbourn, N. Seward, K. Azad, A. Coomarasamy, A. Copas, T. A. J. Houweling, E. Fottrell, A. Kuddus, S. Lewycka, C. MacArthur, D. Manandhar, J. Morrison, C. Mwansambo, N. Nair, B. Nambiar, D. Osrin, C. Pagel, T. Phiri, A. Pulkki-Brännström, M. Rosato, J. Skordis-Worrall, N. Saville, N. S. More, B. Shrestha, P. Tripathy, A. Wilson, A. Costello (2013). *Women’s groups practising participatory learning and action to improve maternal and newborn health in low-resource settings: a systematic review and meta-analysis.* *Lancet,* 381: 1736-46



Support to communities to establish playgroups			
Macdonald et al. 2018	RCT	Tonga	0.17 to 0.19 SD literacy and numeracy school readiness skills for disadvantaged boys and girls in communities, respectively
Scripted reading lesson plans			
Piper & Korda 2011	RCT	Liberia	0.52 - 0.78 SD EGRA
Lucas et al. 2014	RCT	Uganda, Kenya	0.08 - 0.2 SD EGRA
Macdonald & Vu 2018	RCT	Papua New Guinea	0.6 - 0.7 SD EGRA
Macdonald et al. 2018	RCT	Tonga	0.18 SD EGRA
Classroom libraries / book flood			
Ababerese, Kumler, Linden 2014	RCT	Philippines	0.13 SD short term, 0.06 SD long term
Borkum, He & Linden 2012	RCT	India	No effect on language skills
Friedlander & Goldenberg 2016	RCT	Rwanda	0.14 SD reading fluency and 0.21 SD reading comprehension
Yi et al. 2008	RCT	China	No effect
E-readers			
Piper et al. 2016	RCT	Kenya	0.17 SD to 0.26 SD

10. **Evidence-based scripted lesson plans.** In many countries, in-service teacher training has shown generally little evidence of impact, and one reason is the focus on knowledge rather than teaching techniques⁷². Component 2.1 establishes scripted lesson plans to improve teaching techniques based on evidence on the sequencing and skills children need in order to learn to read alphabetic languages research^{73 74 75 76}. RCTs of similar interventions to that supported under Component 2.1 have shown large positive effects on reading skills (Table A3.1); this includes two RCTs conducted in Pacific Island contexts in Tonga and PNG. Similar approaches would be applied to the P4ER reading intervention supported under Component 2.2.

11. **Structured pedagogy interventions have the largest and most consistent positive effects on learning outcomes.** Recent Bank studies have identified structured pedagogy combined with continuous feedback and re-training as one of the most effective interventions at the school/classroom level in terms of its impact on learning.⁷⁷ In China and Vietnam, structured pedagogy (in the form of teacher guides and focused textbooks) has positively impacted PISA scores, raising them significantly above the predicted scores by income level.⁷⁸ The Africa Facing Forward

⁷² Popova, A. Evans, D. Arancibia, V. 2016. Training Teachers on the Job: What Works and How to Measure It. Policy Research Working Paper, No. 7834 Washington, DC.: World Bank

⁷³ August, D., and Shanahan, T. 2006. Developing Literacy in Second-Language Learners: A Report of the National Literacy Panel on Language, Minority Children, and Youth. Mahwah NJ USA: Lawrence Erlbaum Associates

⁷⁴ National Institute for Child Health and Human Development 2000. Report of the National Reading Panel. Teaching Children to Read: An Evidence-based Assessment of the Scientific Research Literature on Reading and its Implications for Reading Instruction. (NIH Publication No. 00-4754). Washington, DC: National Institutes of Health

⁷⁵ Pressley, M., 1998. Reading Instruction That Works: The Case for Balanced Teaching. New York: The Guilford Press

⁷⁶ Snow, C.E., Burns, M.S., and Griffin, P. 1998. Preventing Reading Difficulties in Young Children. National Academy Press, Washington, DC

⁷⁷ Snilstveit, birte, Stevenson, Phillips, Vojtkova, Gallagher, Schmidt, Jobse, et al. 2015 *Interventions for Improving Learning Outcomes and Access to Education in Low-and Middle Income Countries*. 3ie Systematic Review 24. London.

⁷⁸ World Bank. 2019. *Ending Learning Poverty: What will it take?*



report⁷⁹ also highlights successes in Kenya, where a structured pedagogy intervention to improve literacy instruction provided training workshops, semi-scripted lesson plans, and weekly text-message support to teachers and improved literacy outcomes.⁸⁰ In Ghana, success under a similar intervention (Teacher Community Assistant Initiative) reported learning gains after just one year of implementation.⁸¹ Pilots supported by the World Bank offering remedial lessons have influenced the proposed project.

12. **Teacher training is a key element of most education programming.** Effective teachers collaborate with other teachers to improve their teaching, plan their lessons meticulously, can identify misconceptions in student understanding of content, have high content knowledge, and use questioning techniques. All these features were identified as key practices that high performing teachers employ in East Asia, which has some of the highest educational outcomes in the world.⁸² Bold et al. (2017) found that low teacher content knowledge accounts for a large proportion of the learning gap in Africa: a unit increase in teacher's education increases student achievement by 3 percent, while in East Asia, collaboration and teamwork are essential elements of the system sometimes even affecting promotion.⁸³ The key elements that make for effective teacher training are: (a) linking career opportunities to professional development; (b) follow-up visits and continuous monitoring/ coaching and mentoring visits; and (c) continuous practice of new pedagogical approaches.⁸⁴ Use of technology can support expanding in-school teacher support. For instance, in South African public schools locally designed low-cost integrated technology (using tablet-based lesson plans and e-coaching) was found to be a cost-effective alternative to on-site coaching.⁸⁵
13. **E-readers.** Component 2.2 supports the use of e-readers in Tuvalu in order to improve access and use of reading materials for primary school students. A RCT of e-readers coupled with teacher training in Kenya increased reading test scores by 0.17 to 0.26 SD in English and Kiswahili, respectively⁸⁶; however, this study found that effect sizes were similar to an alternative intervention using non-ICT approaches and suggested ICT approaches are favourable only if costs were lower than non-ICT methods. Given the distance of many schools in Tuvalu, e-readers are likely a cost-effective approach to disseminate reading materials to schools versus printing and shipping books. The effect of Component 2.2 is expected to occur primarily through the exposure of high interest reading materials. A number of RCTs have evaluated the effect of increased supply of high interest books coupled with teacher training programmes. Effect sizes vary from having no effect to 0.21 SD (Table A3.1).

Cost-benefit analysis

⁷⁹ Bashir, Sajitha, Marlaine Lockheed, Elizabeth Ninan, and Jee-Peng Tan. 2018. *Facing Forward: Schooling for Learning in Africa*. Africa Development Forum series. Washington, DC: World Bank.

⁸⁰ Matthew C. H. Jukes, Elizabeth L. Turner, Margaret M. Dubeck, Katherine E. Halliday, Hellen N. Inyega, Sharon Wolf, Stephanie Simmons Zuilkowski, and Simon J. Brooker. 2017. *Improving Literacy Instruction in Kenya Through Teacher Professional Development and Text Messages Support: A Cluster Randomized Trial*. *Journal of Research on Educational Effectiveness*, 10:3, 449-481.

⁸¹ Innovations for Poverty Action. 2018. *The Impacts of Fast Track Transformational Teacher Training in Ghana*.

⁸² World Bank. 2018. *Growing Smarter: Learning and Equitable Development in East Asia and Pacific*. World Bank East Asia and Pacific Regional Report. Washington, DC: World Bank.

⁸³ Bold, Tessa, Deon Filmer, Ezequiel Molina, and Jakob Svensson. "The Lost Human Capital: Teacher Knowledge and Student Achievement in Africa." Unpublished paper (2017).

⁸⁴ Evans, David, and Anna Popova. 2015. *What really works to improve learning in developing countries? An analysis of divergent findings in systematic reviews*.

⁸⁵ World Bank. 2019. *Ending Learning Poverty: What will it take?*

⁸⁶ Piper, Benjamin, Stephanie Simmons Zuilkowski, Dunston Kwayumba, Carmen Strigel (2016). Does technology improve reading outcomes? Comparing the effectiveness and cost-effectiveness of ICT interventions for early grade reading in Kenya. *International Journal of Educational Development* Volume 49, July 2016, Pages 204-214



14. **Costs.** The costs of Components 1 and 2 can be divided into two parts. The first set of costs is the setup costs to establish the proposed activities including playgroups, new teaching methods, e-readers, etc. These only need to be incurred once in order to establish the activities and primarily includes the development of new materials and creating capacity within the government to implement the activities. The second set of costs is the recurrent costs needed to operate the new activities. These include coaching and mentoring of teachers and ECCE staff but also the periodic purchase of new materials including e-readers to replace those that have worn out. Setup costs and the annualized recurrent costs as well as per student annualized recurrent costs are presented in Table A3.2. In estimating the annualized recurrent costs, it is assumed that at the end of the project the teacher training financed by the project would be incorporated into existing teacher training; the teacher training provided under the project are, for this reason, classified as part of the setup costs.

Table 2. Costs and beneficiaries (US\$)

Component	Setup	Annualized recurrent		
	Cost	Cost	Direct beneficiaries per year*	Cost per beneficiary
Component 1	424,493	110,117	676	163
Component 2.1	2,256,824	209,449	633	331
Component 2.2	162,081	75,619	1,687	45
Total	2,843,398	395,185	n.a.	n.a.

*Direct beneficiaries per year for Components 1, 2.1 and 2.2 are based on number of students, respectively, in ECCE in 2019, 3/8s of students in primary, and all students in primary in 2019.

15. **Benefits.** For the cost-benefit analysis, the benefits of Components 1 and 2 are modelled in two steps. The first is the effect of the interventions on the cognitive skills of the students, and the second is the effect of the increased cognitive skills on future earnings. Neither effects are currently known; however, international research provides an indication of the range of effect sizes that are possible. Table A3.1, for example, provides possible effect sizes for the main three interventions on cognitive skills. Table 7 in Patrinos and Psacharopoulos (2010)⁸⁷ provide a range of possible effects of a standard deviation increase in cognitive skills on future earnings. Together these provide a range of possible effects of the interventions on future earnings and the subsequent stream of future benefits. Note that this ignores other channels through which benefits can occur including increased health, better citizenship, and other spillovers (see World Bank (2018) for a discussion⁸⁸); the benefits are therefore treated as underestimates.

16. **IRR Modeling methodology and assumptions.** The baseline future stream of earnings is predicted using a Mincerian earnings function estimated using the Tuvalu 2015 HIES and adjusted for economic growth using forecasts by the IMF WEO 2019 October edition. This provides a value of future *potential* benefits based on equilibrium macroeconomic conditions; actual benefits may differ due to unanticipated economic shocks including the ongoing COVID-19 pandemic and any subsequent recovery. In addition, data entry issues were reported with the 2015 HIES; however, this is the only source of data available and the model’s estimates do not appear unreasonable. Individuals earn between age 18 and 65, and their expected years of schooling is that estimated for Tuvalu by the World Bank’s Human Capital Project. The effects of the interventions are treated as cumulative: the total effect on cognitive skills of an individual is the sum of effects of playgroups (weighted by the likelihood of a primary student having attended ECCE), the early grade reading intervention, and the e-reader intervention, depending on which interventions a cohort would be exposed to. Effects of the remedial reading program are ignored to simplify the analysis. The additional stream of future earnings is the cumulative effect of the interventions on cognitive skills multiplied by

⁸⁷ Patrinos H A and Psacharopoulos G (2010), Returns to Education in Developing Countries. In: Penelope Peterson, Eva Baker, Barry McGaw, (Editors), International Encyclopedia of Education. volume 2, pp. 305-312. Oxford: Elsevier

⁸⁸ World Bank (2018) Learning to realize education’s promise. Washington, D.C.: The World Bank



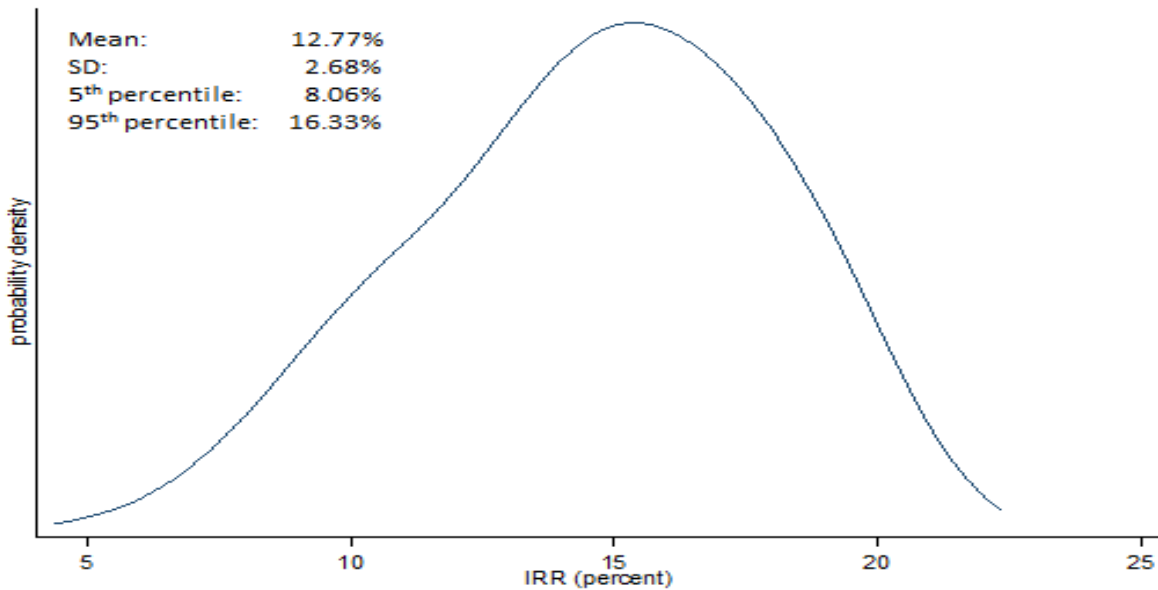
the effect of cognitive skills on earnings. The stream of net benefits is the additional stream of earnings minus the annualized per student recurrent costs. Setup costs are assumed to be incurred over the first 5 years, and the benefits are expected to last for 10 cohorts of students starting with those currently aged 6. The effects of the interventions are unknown and treated as four random variables (one each for the playgroup intervention, the early grade reading intervention and the e-reader intervention, and one for the effect of cognitive skills on earnings) distributed based on the effect sizes of evaluations and studies presented in Patrinos and Psacharopoulos (2010). An IRR is calculated for each combination of effects from these sources; this provides a distribution of IRR whose mean provides a point estimate of the IRR and the standard deviation provides a sensitivity analysis.

- 17. **Internal rate of return.** The modeled IRR estimate is 12.77 percent. Based on the distribution of effect sizes of the interventions evaluated previously in other contexts as well as the range of possible effects of cognitive skills on earnings, the modeled IRR estimate has a standard deviation of 2.68 percent, and its probability distribution is presented in Figure 1. This distribution depicts the sensitivity of the IRR estimate to varying effect size scenarios as described above. The IRR is unlikely to be less than 8.06 percent which is the 5th percentile of the distribution.

Fiscal sustainability

- 18. **Annualized recurrent costs.** Table A3.2 presents the annualized recurrent costs of maintaining Component 1 and Component 2 at the completion of the project. As noted, this excludes the teacher training providing by the project as this is expected to be incorporated into Tuvalu’s existing teacher training activities. The total annualized recurrent cost of maintaining these two components is US\$395,185.

Figure 1. Estimated IRR and sensitivity analysis



The effects of the proposed interventions on cognitive skills and subsequently the effect of increased cognitive skills on future earnings is unknown *ex ante*. Given variation in effect sizes of similar interventions internationally and the variation in the association between cognitive skills and earnings internationally, this figure depicts the probability distribution of the IRRs providing an overall estimated IRR and its sensitivity to varying scenarios of effect size (see discussion in text).



19. **Fiscal sustainability.** Table A3.3 presents the annualized recurrent costs of Components 1 and 2 as a proportion of the estimated education budget for 2020 in order to understand the ability of the government to continue to maintain the programmes established by the project. Note that budget projections are available until 2022, but student population projections are currently unavailable; however, the comparison with the 2020 budget likely reflects the percent of the budget at the end of the project adjusting for changes in the number of students and inflation. Overall, the annualized recurrent costs of Components 1 and 2 are 5.1 percent of the MEYS recurrent budget. Component 1 and Component 2 represent 16.4 and 16.9 percent of the ECCE and primary budgets (recurrent and non-recurrent), respectively.

Table 3. Annualized recurrent costs to maintain Components 1 & 2 as percent of MEYS budget (US\$)

Estimated recurrent MEYS budget 2020	11,158,800
Estimated primary education budget 2020	2,481,200
Estimated ECCE budget 2020	933,100
Annualized recurrent costs of Components 1 & 2 as a percent of estimated recurrent MEYS budget 2020	5.1
Annualized recurrent costs of Component 2 as a percent of the estimated primary education budget 2020	16.4
Annualized recurrent costs of Component 1 as a percent of the estimated ECCE budget	16.9

Budget data taken from the 2020 Final Budget Document; exchange rate: 1 USD to 1.43 AUD.