



REPORT

WORKSHOP IN DEVELOPMENT PRACTICE

FALL 2018- SPRING 2019

DEVELOPMENT OF AN ENGLISH READING ASSESSMENT TOOL FOR 5TH GRADE STUDENTS IN LAOS

CLIENT: PENCILS OF PROMISE



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1. Executive Summary

Pencils of Promise (PoP) is a non-profit organization that recognizes the value of quality education and believes that all children deserve access to it. PoP has established three programs through which they build safe schools, support teachers, and provide health services to students to change educational practices and, ultimately, improve learning outcomes for children in Laos, Guatemala, and Ghana.

The Teacher Support Program is the organization's main direct intervention for improving literacy. This program uses innovative teaching methods and technologies to support and train teachers on an on-going basis. In Laos, PoP's Teacher Support Program focuses on fostering the development of English teachers.

To measure the changes in the literacy levels of children taught by PoP supported teachers, the organization previously used the Early Grade Reading Assessment (EGRA). Due to the particular linguistic context and students' range of skills in Laos, PoP decided to adapt the Annual Status of Education Report (ASER) Literacy Assessment Tool. The PoP team developed a 3rd and 4th-grade version of the ASER tool.

Starting in the 2019-2020 school year, PoP will expand its Teacher Support programming in Laos into the 5th grade and, therefore, will require a 5th-grade version of the ASER tool. PoP tasked the SIPA workshop team to develop a 5th-grade version of an English reading assessment tool based on the ASER tool through rigorous methods of content selection and pilot testing.

Based on the conducted research and results from the pilot roll-out, the SIPA team recommend that the assessment tool measures students' receptive and productive vocabulary. In order to do so, sections on object recognition and image recognition should be included in the assessment tool to measure receptive vocabulary, and sections on word reading and letter reading, to assess productive vocabulary. Moreover, the SIPA team recommends that as the Teacher Support program is developed and implemented in the 5th grade in Laos, a section on phrase reading be included in the tool.

2. The Client

Several studies have shown that quality education positively impacts students' daily-life in multiple ways. It is not only associated with higher income¹ and improved health² but also with reducing the gender gap³, poverty and increasing well-being at large.⁴ Moreover, the multiplier effect of education not only empowers people themselves but also enables them to contribute and have meaningful participation in the society which leads to an improvement in livelihoods.⁵

Founded by Adam Braun in October 2008, Pencils of Promise (PoP) is a non-profit organization that recognizes the value of quality education and believes that all children deserve access to it. They have established three programs that contribute to change behavior around educational practices and, ultimately, improve educational outcomes for children in Laos, Guatemala, and Ghana.⁶ The *Teacher Support* program uses innovative teaching methods and technologies to support and train on an on-going basis to create engaging, child-centered learning environments in full alignment with national curricula and standards. The *WASH* program provides schools with access to clean drinking water and sanitation facilities and teaches kids about potable water, sanitation and hygiene. Finally, the *School Builds* program focuses on creating a safe, sound school structure for students.⁷

These three programs are intended to work together to form long-lasting, collaborative relationships with communities and government. As per April 2019 data, across the three countries, the organization has impacted 99,929 students, supported 1,471 teachers and built 503 schools. It has implemented the Teacher Support program in 157 schools and WASH program in 115 schools.^{8,9}

2.1 Teacher Support Program

PoP advocates that students would perform better if classrooms are led by enthusiastic, inspired and well-trained teachers.¹⁰ Hence, the Teacher Support program equips teachers with innovative teaching

¹An educated child is motivated as an adult to send its children to school, thus preventing transmission of poverty through generations and ultimately breaking the cycle of poverty and increasing the household income over time.

²Education is a medium of transmitting information about health and hygienic practices, and for low and lower middle-income countries, it is believed that if women are educated (or at least completed primary education), then it would lead to a decrease in the under-5 mortality rate by 5%.

³Education is a powerful tool especially for girls, as it empowers them to look forward to a future beyond marriage and provides them the strength to believe and achieve their goals and make appropriate life choices. Education gives them an opportunity to stand up for their dreams and not succumb to societal pressure. Education is not only crucial for girls but also boys as it helps them in understanding the importance of gender equality and also makes them think of everybody as equal.

⁴An educated family tends to create ripple effects of educated generations. The impacts of an educated family are not only limited to the educated forthcoming generations, but it also contributes to society at large, in terms of a better understanding of human rights and gender equality.

⁵UNESCO. (2018, March 19). *Literacy*. Retrieved April 12, 2019, from <https://en.unesco.org/themes/literacy>

⁶ Pencils of Promise. (2018). *The Issue*. Retrieved December 1, 2018, from <https://pencilsofpromise.org/programs/the-issue/>

⁷ Pencils of Promise. (2018). *Approach*. Retrieved December 1, 2018, from <https://pencilsofpromise.org/approach>

⁸ Pencils of Promise. (2018). *Results*. Retrieved April 29, 2019, from <https://pencilsofpromise.org/results/>

⁹Pencils of Promise. (2019, April 1). *Program Outputs - Overview*. Retrieved April 30, 2019, from <https://public.tableau.com/profile/pencilsofpromise#!/vizhome/18120311ProgramOutputsOverview/PoPOverview>

¹⁰Pencils of Promise. (2019, April 1). *Teacher Support*. Retrieved April 30, 2019, from <https://public.tableau.com/profile/pencilsofpromise#!/vizhome/Two-pager-TeacherSupport/PoP>

methodologies and age-appropriate, dynamic materials to enhance the curriculum through workshops and coaching sessions, which helps them in delivering effective lessons.¹¹

When supporting teachers, PoP focuses on three pillars: Pedagogical Support, Class Management and Social-Emotional Learning. The first pillar provides teachers with methods, techniques and materials best suited to teach reading and writing skills, while the second pillar focuses on strategies to help teachers keep the students engaged in the class sessions. The last pillar provides strategies to foster supportive relationships for better learning outcomes among children; these strategies are grounded in five core competencies: self-awareness, self-management, social-awareness, relationship skills and responsible decision making.¹² These pillars are delivered through practice during the coaching session, in which teachers also receive training on the curriculum.¹³

PoP collaborates with local communities, governments and impact partners such as 2U, Stuart Weitzman etc.,¹⁴ in order to create sustainable solutions, where the core components are defined and designed in accordance with each country's context and national curriculum standards.¹⁵

3. The Project

3.1 Education in Laos

The following project is based in Laos, which is a small landlocked country in Southeast Asia and one of the few remaining communist states.¹⁶ The country faces major developmental challenges having an annual per capita income of around \$2,577 as of 2018.¹⁷ Poverty is one of the most pressing issues and there has been an ongoing effort in part of the government in reducing the poverty rate from 46% in 1992 to 23% in 2015.¹⁸

In Laos, the education sector has been the most affected sector by the lack of financial resources. In comparison to the world average of 4.73%¹⁹, in 2014, the Government of Laos spent less than 3% of its GDP on education, of which nearly 40% was allocated towards primary education.²⁰ Due to being deeply under-budgeted, the education sector in Laos relies heavily on external funding.

¹¹Pencils of Promise. (2019, April 1). *Teacher Support- Program Outputs*. Retrieved April 30, 2019, from <https://public.tableau.com/profile/pencilsofpromise#!/vizhome/QTR-OutputsII/TSOutputs>

¹²Pencils of Promise. (n.d.). *Teacher Support Program Outline*. (n.d.). Retrieved April 30, 2019, from <https://docs.google.com/document/d/1bkeqIWSqDfOf7Oc56mJXxFC81IO-0hW83I8z2ipeD84/edit>

¹³ Pencils of Promise. (n.d.). *Teacher Support Program Outline*. (n.d.). Retrieved April 30, 2019, from <https://docs.google.com/document/d/1bkeqIWSqDfOf7Oc56mJXxFC81IO-0hW83I8z2ipeD84/edit>

¹⁴Pencils of Promise. (n.d.). *Partners*. Retrieved May 09, 2019, from <https://pencilsofpromise.org/about/partners/>

¹⁵Pencils of Promise. (n.d.). *Teacher Support Program Outline*. (n.d.). Retrieved April 30, 2019, from <https://docs.google.com/document/d/1bkeqIWSqDfOf7Oc56mJXxFC81IO-0hW83I8z2ipeD84/edit>

¹⁶ BBC News. (2018, July 24). *Laos country profile*. Retrieved April 30, 2019, from <https://www.bbc.com/news/world-asia-pacific-15351898>

¹⁷ World Bank. (2019, April 4). *The World Bank In Lao PDR*. Retrieved April 30, 2018, from <https://www.worldbank.org/en/country/laos/overview>

¹⁸ UNDP. (2019). *Goal 1: No Poverty*. Retrieved May 2, 2019, from http://www.la.undp.org/content/laos_pdr/en/home/sustainable-development-goals/goal-1-no-poverty.html

¹⁹ UNESCO Institute for Statistics. (2019). *Government expenditure on education, total (% of GDP)*. Retrieved May 09, 2019, from https://data.worldbank.org/indicator/se.xpd.totl.gd.zs?end=2018&most_recent_year_desc=false&start=2004&view=chart

²⁰ World Bank. (2019). *Education Statistics (EdStats)*. Retrieved April 24, 2019, from <http://datatopics.worldbank.org/education/country/laos-pdr>

Though the country has been successful in achieving high net enrollment rates for primary education at 98.7% (2017) and a gender parity index of 0.99 (2017) at primary level, the learning outcome levels remain low, leaving children without essential knowledge and skills²¹. Moreover, the country also faces high dropout rates especially in grade 1 of secondary education²², which according to UNICEF, might be attributed to the limited access to quality of Early Childhood Education (ECE) programs²³. These issues are accentuated by lack of educational infrastructure as well as lack of educated and qualified teachers, a weak pedagogical supporting system and various other challenges related to multi-grade teaching²⁴ along with maneuvering the region's ethnic and cultural complexities.^{25, 26}

The Government of Laos has taken various steps towards providing quality education to the children in the country. One of the most important programs has been the establishment of compulsory, free and universal education from pre-K to 5th grade, and creating more preschools in many communities.²⁷

The Ministry of Education of Laos implemented an educational reform in which it was decided to include English as a subject in the curriculum of primary schools starting in 3rd grade, beginning from the academic year 2009-2010.²⁸ The implementation of the curriculum did not come with proper teacher training; thus, in many cases, those teachers tasked with teaching English had never been exposed to the language before. Lack of qualified teachers in English Language is more prevalent in rural areas of Laos, especially in the Luang Prabang province. Unqualified teachers affect the quality of lessons the students are exposed to. Additionally, English is often the third or fourth language being learned by the students and is only taught once a week for one and a half hours.²⁹



Figure 1: Map of Laos

Source:

<https://www.givechildrenachoice.org/programs-and-projects/preschool-projects/laos-xieng-khouang-province/>

²¹ Global Partnership for Education. (2018, September 26). *Education in Lao PDR*. Retrieved April 29, 2019, from <https://www.globalpartnership.org/country/lao-pdr>

²² Global Partnership for Education. (2018, September 26). *Education in Lao PDR*. Retrieved April 29, 2019, from <https://www.globalpartnership.org/country/lao-pdr>

²³ UNICEF. (2019). *Education*. Retrieved May 2, 2019, from <https://www.unicef.org/laos/education>

²⁴ UNICEF. (2019). *Education*. Retrieved May 2, 2019, from <https://www.unicef.org/laos/education>

²⁵ Hays, J. (2014, May). *Education and Schools in Laos*. Retrieved December 2, 2018, from http://factsanddetails.com/southeast-asia/Laos/sub5_3d/entry-2981.html

²⁶ Room to Read. (n.d). *Our Work in Laos*. Retrieved December 2, 2018, from <https://www.roomtoread.org/media/806096/laos.pdf>

²⁷ UNESCO-IBE. (2010/11). *World Data on Education* (7th ed., Publication). UNESCO-IBE.

²⁸ Manivone, P., Bouakeo, V., Thongsouk, K. and Bounthapany, B. (2012). *English for Lao Primary Schools*. Laos: Ministry of Education and Sports, Research Institute for Educational Sciences.

²⁹ Pencils of Promise. (2018). *Workshop in Development Practice Preliminary Terms of Reference*(Rep.). New York, NY: Columbia SIPA, Economic and Political Development.

3.2 Pencils of Promise in Laos

PoP works with over 115 communities in Laos to ensure that the students overcome the barriers to accessing quality education. Currently, PoP is impacting over 17,000 students and 198 teachers in the country through their three programs and has built 122 schools.³⁰

PoP's Teacher Support program, introduced in Laos in 2012, is its main direct intervention for improving English literacy. The program focuses on fostering the development of local teachers to enhance their instruction skills. Teacher Workshops are held throughout the year to provide teachers with an informal network of peers that helps them discover new methodologies to improve the effectiveness of their teaching. In between those workshops, teachers receive personalized and tailored Coaching Sessions that support them in implementing the most up-to-date strategies and lessons.³¹ Since its implementation in Laos, as of May 2019, PoP has supported 198 teachers, working in over 60 schools and has impacted 6,750 students.³²

To measure the impact and strength of the Teacher Support program, PoP used, until recently, the Early Grade Reading Assessment (EGRA) to assess the development of the key literacy skills of the students in all three partner countries.³³ EGRA is a USAID funded and RTI developed assessment tool that measures phonemic awareness, passage reading fluency and passage comprehension.³⁴

The particular linguistic context and range of skills present in Laos made the EGRA not a suitable assessment tool for Laos. For designing a literacy program that is culturally relevant and beneficiary centered, it is essential that the assessment tool is contextualized. To account for these contextual differences, PoP tried to modify EGRA by adding subtasks to the original assessment tool. However, even after the changes, the students still scored zero on many of the assessment sections. The organization realized that there were growing fundamental differences between what the EGRA program was originally designed to assess and what the Laos program wanted to achieve. With this, PoP set out to look for a more appropriate assessment tool which would fit in the context of Laos region as well as assess the program's goal.

PoP finally adopted the Annual Status of Education Report (ASER) assessment tool, developed in the 1990s by the Indian organization Pratham. *ASER*, in Hindi meaning 'impact,' is an annual survey that provides simple but rigorous estimates of basic literacy levels and mathematical skills in children. This tool is easily adaptable and scalable in a country with language-specific contexts.

3.3 English reading assessment tool for 5th grade students

PoP developed a 3rd and 4th-grade version of the ASER tool to be implemented at the beginning and end of the 2018-2019 school year as a pre and post-test measure. Starting in the 2019-2020 school year, PoP will expand its Teacher Support programming in Laos into the 5th grade and, therefore, will need to develop a 5th-grade version of the ASER tool in early 2019.

³⁰ Pencils of Promise Data Hub. (2019, April 1). *Pencils of Promise - Laos*. Retrieved May 3, 2019, from https://public.tableau.com/profile/pencilsofpromise#!/vizhome/Two-Pager-Laos_0/PoP

³¹ Pencils of Promise. (2018). *Teacher Support*. Retrieved December 2, 2018, from <https://pencilsofpromise.org/programs/teacher-support/>

³² Pencils of Promise Data Hub. (2019, April 1). *Program Outputs: PoP Overview*. Retrieved May 3, 2019, from <https://public.tableau.com/profile/pencilsofpromise#!/vizhome/18120311ProgramOutputsOverview/PoPOverview>

³³ Pencils of Promise. (2018). *Workshop in Development Practice Preliminary Terms of Reference*(Rep.). New York, NY: Columbia SIPA, Economic and Political Development.

³⁴ Dubeck, M. M., & Gove, A. (2015). The early grade reading assessment (EGRA): Its theoretical foundation, purpose, and limitations. *International Journal of Educational Development*, 40, 315-322. doi:10.1016/j.ijedudev.2014.11.004

PoP tasked the SIPA workshop team to develop a 5th-grade version of an English reading assessment tool based on the ASER tool for Laos through rigorous methods of content selection and pilot testing, which will help determine the reliability and validity of the assessment.³⁵ The final delivery of the project was one final version of the assessment tool and a list of recommendations on how to apply the tool.

In order to conduct this project, the SIPA team received approval from the Columbia University Institutional Review Board (IRB) and obtain all the necessary permissions to conduct research with children. The team submitted a summary of the project as well as a sample assessment tool for the review process.

4. Theory

With the ever-increasing digital, text-mediated, information-rich and fast-changing world, literacy today is defined by far beyond concepts than its conventional definition of ability to read, write and counting skills. Today, literacy is also understood as the ability to identify, understand, interpret, create and communicate.³⁶ Reading is a complex skill a person acquires from birth to adulthood. Chall's (1983) *stages of reading development* explain the six stages learners go through (Figure 2).

During all stages, children acquire new receptive and productive vocabulary. Receptive/productive lexical knowledge is a debated area of language and vocabulary. Although there is no single definition of the terms, various studies have been conducted on the topic. In this project, we followed Webb's (2008) idea that "*Knowing students' receptive vocabulary size provides teachers with a gauge as to whether those students will be able to comprehend a text or a listening task, whereas knowing their productive vocabulary size provides some indication as to the degree to which students will be able to speak or write*".³⁷

³⁵ Pencils of Promise. (2018). *Workshop in Development Practice Preliminary Terms of Reference* (Rep.). New York, NY: Columbia SIPA, Economic and Political Development.

³⁶ UNESCO. (2018, March 19). *Literacy*. Retrieved April 15, 2019, from <https://en.unesco.org/themes/literacy> .

³⁷ Webb, S. (2008). RECEPTIVE AND PRODUCTIVE VOCABULARY SIZES OF L2 LEARNERS. *Studies in Second Language Acquisition*, 30(1), 79-95. doi:10.1017/S0272263108080042



Figure 2: Chall's (1983) stages of reading development

According to Webb (2005), most research on receptive/productive vocabulary have focused on either their size or whether receptive knowledge is gained before productive knowledge. Limited research has been done that compares receptive and productive learning. The author points out that research on learning from word pairs suggests that the type of learning—receptive or productive—affects the type and amount of knowledge gained^{38, 39, 40}. If words are learned receptively, then learners are likely to gain significantly more receptive knowledge, whereas productive learning leads to larger gains in productive knowledge.⁴¹

³⁸ Griffin, G., & Harley, T. (1996). List learning of second language vocabulary. *Applied Psycholinguistics*, 17(4), 443-460. doi:10.1017/S0142716400008195

³⁹ Stoddard, G. D. (1929). An experiment in verbal learning. *Journal of Educational Psychology*, 20(6), 452-457. <http://dx.doi.org/10.1037/h0073293>

⁴⁰ Waring, R. (1997) A study of receptive and productive learning from word cards. *Studies in Foreign Languages and Literature*

⁴¹Webb, S. (2005). RECEPTIVE AND PRODUCTIVE VOCABULARY LEARNING: The Effects of Reading and Writing on Word Knowledge. *Studies in Second Language Acquisition*, 27(1), 33-52. doi:10.1017/S0272263105050023

5. Methodology

The methodology used to develop this project was divided into four phases: Research, Assessment Tool Design, Pilot roll-out and Data Analysis.

5.1 Research

During phase one, the team conducted a literature review on two research lines: English Language Learners (ELL) and ASER. For the first research topic, the team focused their analysis on how to increase test accessibility for ELLs, paying particular attention to how ELLs interpret tests and procedures that help clarify the test tasks and purposes. In the second topic, the team centered their research on understanding the approaches undertaken by Pratham to develop the ASER English tool as well as its adaptation in other languages by various organizations. This review influenced the decisions taken by the team regarding the content, and format of each of the sections of the assessment tool as well as the logistical provisions of the test such as the environment in which the assessment should be conducted and the instructions that needed to be provided to the students before the beginning of the assessment.

The team used the gathered information to create various interview and observation protocols⁴² for their first field visit. During January 2019, the team conducted a 10-day field trip to Luang Prabang province, in which they conducted semi-structured interviews with PoP's Learning and Evaluation team, Teacher Support team and English teachers three schools. The interviews pointed-out a series of limitations faced by students in learning English, which included: limited class time (two hours every week), insufficient practice opportunities and homework, and inadequate teachers' English knowledge and training. The lack of English training negatively impacted the teachers' comprehension level of the government textbooks as well as their English pronunciation. Along with conducting interviews, the SIPA team also observed the ASER assessment being conducted for 3rd grade and 4th grade for 3 schools.

Moreover, the interviews conducted with the Learning and Evaluation team and Teacher Support team helped the SIPA team in understanding the rationale of the organization for shifting from EGRA to ASER and how it has been more useful in the field. The 3rd grade and 4th grade versions of the ASER tool created by PoP were shorter, easier to apply and more responsive than the EGRA test. As a result, the SIPA team decided to incorporate lessons from 3rd grade and 4th grade while designing their assessment tool version for 5th grade.

After the field visit, the team conducted a series of semi-structured interviews with experts in the education field from the School of Education, University of California, and Teachers College, Columbia University, whose research areas focused on literacy assessment and testing, multi-linguistic education and language development in different cultures. The interviews focused on understanding what floor and ceiling difficulty levels students should be assessed on and on how to create an assessment tool and process appropriate to the context in Laos.

Dr. Penelope Collins, an expert of reading development and education for second and dual language learners, from University of California, suggested that the team test the students' receptive vocabulary through the use of image recognition. Dr. Collins also advised to adjust the order of words recognition by difficulty level (from common and easy words like "I" for beginners, to basic CVC-structured words like "red" which students find easy to spell out, then to longer and harder words), to separate the different sections of the test through the change of layout, and to include a section of phrases based on the 5th-grade

⁴² Interviews during January trip with PoP Laos staff from Learning and Evaluation Team, Teacher Supporting Team, the educational consultation and administration.

textbook. Regarding the implementation of the assessment, she suggested that the test starts with the section of image recognition so that the students feel more interested.

The professors consulted from the Teachers College, suggested to assess receptive language, not only with a section of image recognition but to include a section of object recognition, where the students would be asked to look at the displayed objects and then point to the one which was said by the tester. Such a test would first measure if the students recognize the actual objects followed by the question of whether they are able to identify the representation of that object. Moreover, the professors suggested that the images included in the test to not be cartoons, but a realistic photo of the object. as drawings or cartoons are harder for children to identify and they tend to relate more to something that they see realistically.

Following the interviews, the team conducted an analysis of the Lao Curriculum and English Textbooks. The contents of the English textbooks emphasize illustration-based learning adapted to the Laos context. In the three grades (i.e., grade 3-5), the activities stress on four skills: listening, speaking, reading and writing. The objective of such activities is to build basic knowledge of the English language of the students in order to help them in their further studies.⁴³

The 3rd grade textbook focuses on building the foundation of the English language, using mainly speaking activities. Students are introduced to the alphabets; starting with vowels and then progressing onto consonants, and also showing upper and lower cases letters- using objects or animals associated with each letter. The 4th grade textbook emphasizes the students' counting skills and their ability to recognize objects from their daily life such as classroom objects. This is facilitated by reading and writing short sentences in order to also introduce action words and adverbs. 5th grade focuses on communication skills, through speaking activities in pairs and the use of short sentences.

Each textbook was thoroughly analyzed, and the frequency of each word appearing in the textbook was noted. This exercise was done in order to understand how often the student was exposed to the word and in what context was the word used. After the textbook review, the team analyzed the words with high frequency that were common in two of the three grades followed by the words that were common across all the grades. This analysis was conducted in order to identify the different levels at which the students have been exposed to certain words over the three years of English classes and what words would be most familiar to them. For example, words such as 'apple' and 'pen' appear in both 3rd grade as well as in the 4th grade while words such as 'pencil' and 'tree' are common in 4th and 5th grade. Some of the words that were found to be appearing in all grades were 'egg', 'book' and 'fish'.

5.2 Assessment Tool Design

Based on the gathered information, the team decided to use the following guidelines to create the assessment tool in phase two: a) to assess receptive vocabulary through the use of object recognition and image recognition; b) create more than one version of the assessment tool, each of which varied in difficulty level and application time; and c) assess whether students can read phrases, as the English Curriculum states that students in 5th grade are expected to be able to read short sentences. As a result, the team created three versions of the assessment tool that included the following sections: *object recognition*, *image recognition*, *reading of words*, *reading of letters* and *reading of phrases*.

⁴³ Manivone, P., Bouakeo, V., Thongsouk, K. and Bounthapany, B. (2012). *English for Lao Primary Schools*. Laos: Ministry of Education and Sports, Research Institute for Educational Sciences.

Version 1 of the assessment tool included the following sections: object recognition, image recognition, reading of words and reading of letters. The items chosen for the object and image recognition were selected according to the list of words included in the reading of words section. All of the words picked were nouns and appeared repeatedly in the 3rd grade and 4th grade textbook. In addition, this version also included a few nouns from the 5th grade textbook. This version of the tool assessed students' receptive vocabulary in the first two sections: objects and images. In both of these sections the students were asked to indicate the object or image that represented the word said by the assessor. After hearing the word twice, the students were assessed on productive vocabulary, by asking them to read the word in the tool. For the reading of letters section this version included alphabets that have similar written form in upper and lower case.

Version 2 included an image recognition, reading of words and reading of letters sections. In the same way as in Version 1, the items chosen for the image recognition section were selected according to the list of words included in the reading of words section. This version included a larger pool of nouns from the three grades' textbooks, particularly those that appeared in the 5th grade textbook. In this version, students' receptive vocabulary was only assessed through the use of images. The students heard the assessor say the word only once, in the image recognition section, before being asked to read the word from the reading of words section. For the letter recognition section, in addition to the alphabets from version 1, the remaining vowels were included along with some consonants. The consonants selected were in accordance to their appearance in the 3rd grade textbook.

Finally, version 3 included the same sections as version 2 but had an additional section of reading of phrases. However, unlike version 1 and version 2, the items chosen for the image recognition section does not reflect the words included in the reading of words section. This version included nouns, verbs, and adjectives from the 5th-grade textbook, arranged according to their difficulty level (from common words to five-letter words). In this version, the students were asked to read the word from the reading of words section without hearing the assessors say the word before. The recognition of letters section included a mix of alphabets with similar written forms in upper and lower case, vowels and consonants.

In all the corresponding sections, the selected objects and images were chosen based on their cultural relevance, which was corroborated by PoP's staff in Laos. In addition to the three versions, the team created instructions on how to apply the instruments as well as grading sheets to record students' responses.

5.3 Pilot roll-out

Between March 18 and March 22, 2019, the team piloted the three versions of the assessment tool in Luang Prabang province, where all PoP schools in Laos are located. The aim of the Pilot was not to assess the impact of the PoP's Teachers Support program but to validate the applicability of the tool the team designed.

The team visited ten schools in different school-districts, five of which have received the Teacher Support Program, known as the treatment schools and five schools that PoP built but

had not received the program which were identified as control schools. In every school, the Learning & Evaluation team accompanied by the SIPA team, administered the three versions of the assessment tool.

The six assessors from PoP were divided into two teams, each of which was accompanied by at least one of the SIPA team members, assessing a total of 126 students. Each team visited one school per day and interviewed 13 English teachers present at the schools (five control schools and eight treatment schools). At the beginning of the week, all assessors were trained on each of the versions of the assessment tool and they applied the same version throughout the week. Table 1 summarizes the distribution of the students assessed in each of the assessment versions and by type of schools. The assessors testing version 3, applied version 3a from Monday-Wednesday and version 3b on Thursday and Friday. This accounts for the difference between the number of students assessed on each of the versions as seen in the table.

Table 1: Distribution of students assessed, by type of school

Version/ Type of School	Number of Students		Total
	Treatment	Control	Total
Version 1	20	22	42
Version 2	21	23	44
Version 3a	14	11	25
Version 3b	5	10	15
Total	60	66	126
source: primary survey data (pilot)			

Each of the teams aimed to test as many students as they could in the time they had allotted in the school. The long hours of travel to the schools from the city allowed the teams to have on an average one hour of testing time in each school. In the available time, on average each team could test 15 students per school which amounted to 42 students for version 1, 44 for version 2, 25 for version 3a and 15 for version 3b. In some schools the number of tests were less because there were students absent that day from class. The Learning & Evaluation team was asked to test, if possible, as many boys as they did girls. The order in which students were tested and what version each student had to do was randomly decided by the English teachers and the officer from the Ministry of Education that accompanied all the visits.

At the end of each day, SIPA team members met with the Learning & Evaluation team to discuss preliminary results and observations from the field. With this in mind, the assessors were also asked to make note of the common mistakes made by the students during the assessment.

The SIPA team gathered the observations made by assessors along with their feedback each day and provided its own feedback to make sure that the application of the three versions was as homogeneous as possible. At the end of the week, an early data analysis was presented to the Learning & Evaluation Team and additional feedback from their experience was gathered in order to further inform the design of the final version of the assessment tool.

5.4 Data Analysis

The data collected from the 126 assessed students, in the form of physical grading sheets was transferred into Microsoft Excel. Version 3a and version 3b were combined together to give a total of 40 students being tested for the same images and words, with 25 students tested for letters and 15 tested for phrases.

The responses were analyzed along with the most responsive item in each section and in each version. Moreover, the responses were analyzed looking for differences between treatment and control school and an analysis in terms of the gender.

Notes from all teacher interviews were uploaded daily to a consolidated file during the field trip. Later, the notes were divided between those taken in treatment and control schools and codified for major trends on the responses using the qualitative software NVIVO.

6. Results

When comparing the results across sections (Table 2), results show that the highest percentage of correct answers was recorded on the two sections that measured receptive vocabulary: the object recognition section, recorded correct answers of 50% and, the image recognition section, recorded 42%.

Table 2: Percentage of correct responses, per section

Section	Total
Objects	50 %
Images	42 %
Words	9 %
Letters	32 %
Phrases	0 %

source: primary survey data analysis (pilot)

On the three sections that measured productive vocabulary (words, letters, and phrases), the results show that the children had the lowest scores. For the letter section, students responded 32% of the questions correctly being this the highest scored section of productive vocabulary. For the word section, students got less than 10% of the correct responses. Lastly, for the phrases section there were no correct responses. (Appendix-VI: Pilot results for different sections)

In the object recognition section, 'apple' was the object with the highest response rate, with a 100%. However, during the field trip, it was gathered that students also call that object 'apple' in Lao language, which explains the high response rate for this particular object. Next, the objects 'ball', 'book', 'egg' and 'pen' got between 50% and 55% of correct responses. Finally, 'broom', 'rice' and 'cap' were correctly recognized 33%, 31% and 24%, respectively. It is worth noted that 'Pen' was often confused by students with the word 'pencil', and 'cap'. With the word 'hat'.

Some images were common across the image recognition section of the three versions, while other were particular to one version. Out of the images tested, 'apple', received the highest percentage of correct responses with 90%. The images of 'dog', 'ball' and 'book' all received

over 50% of correct responses. The images of tree’ and ‘noodles’ ranked lowest for all the students assessed, with 10% and 3%, respectively.

For the word recognition section, across the three versions, none of the words received a correct response rate over 50%. The word ‘apple’ was read with a correct response rate of 44% followed by ‘book’ with a correct response rate of 28%. There were eleven words that had no correct responses.

The letter recognition section was assessed on all the three versions using a combination of upper case, lower case, vowels and consonants and letters that have the same form in upper and lower case (e.g.: C, O, P, S, U, X, Z). Overall, in terms of correct response rate, students recognized more uppercase letters (35%) than lower case letters (20%), more vowels (40%) than consonants (23%) and more letters that had the same form in upper and lower case (34%) than letters that a had different form of upper and lower case (22%). Lastly for the phrases section, only included on version three, the children had zero correct response rate as none of them could read the phrases on the assessment tool.

The results across versions are presented below in Table 3. Version 1, where the word was spoken twice before the students was asked to read the word from the assessment tool, had a percentage of correct responses of 21% in the word recognition section, whereas for version 2, in which students only heard the word once before being asked to read it from the tool, had 11% correct responses. For version 3, where the children do not hear the word before being asked to read the word, this percentage falls down to 2%.

Table 3: Percentage of correct responses, perversion

Sections	Version 1	Version 2	Version 3
Objects	50 %		
Images	54 %	49 %	25 %
Words	21 %	11 %	2 %
Letters	34 %	34 %	29 %
Phrases			0 %
source: primary survey data analysis (pilot)			

From the comparison of the results of between the treatment and control schools, it was observed that the treatment schools performed better than control schools in all of the sections of the assessment (Figure 3). The performance of treatment schools doubled the performance of control schools on the word and letter reading sections.

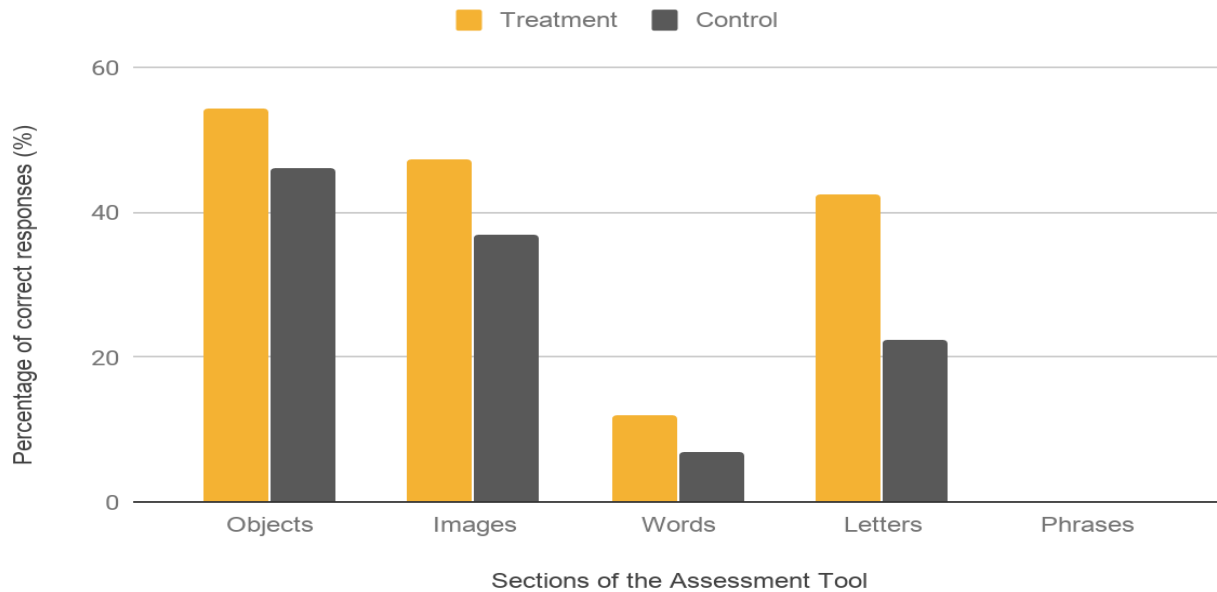


Figure 3: Percentage of correct responses, per section and school type
 source: primary survey data analysis (pilot)

Both schools recorded the highest response rates in the sections that measured receptive vocabulary, though there is a 10 percentage point difference between them, in favor of the treatment schools.

Among the 126 students assessed that were assessed 54% were boys (69 boys) and 46% were girls (57 girls). The average age for both the boys and the girls assessed was 11 years. As can be seen from Figure 4, boys performed better on the two sections that measured receptive vocabulary (i.e., object recognition and image recognition), while girls performed better in the section that measured productive vocabulary (i.e., reading of words).

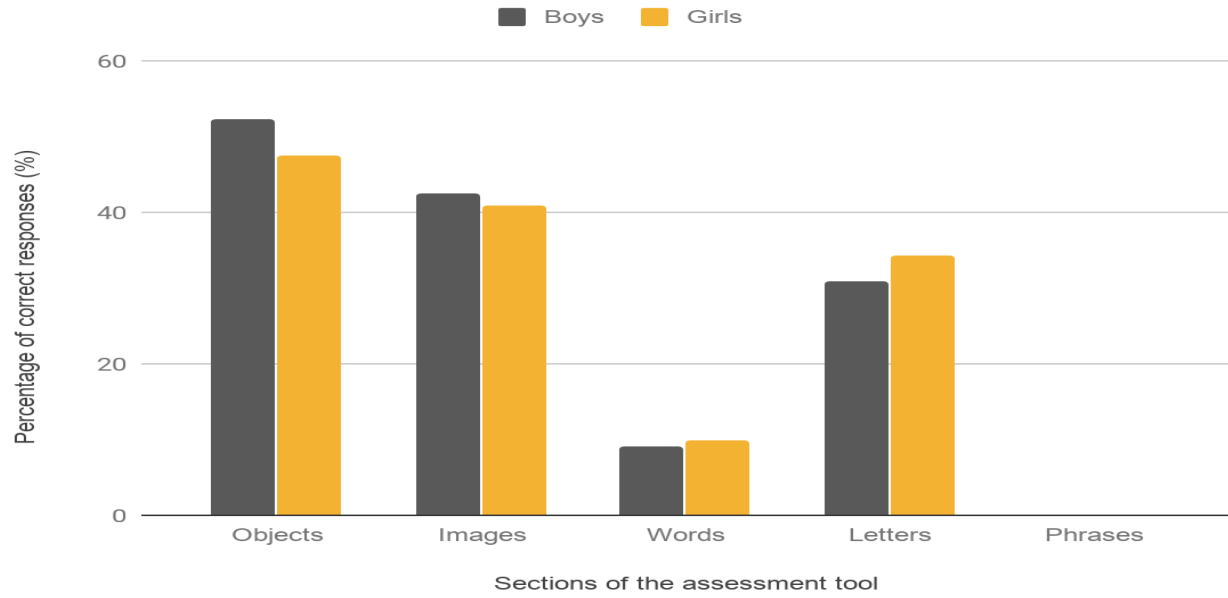


Figure 4: Percentage of correct responses, per section and by gender
 source: primary survey data analysis (pilot)

Apart from student assessment, the SIPA team also conducted semi-structured interviews with thirteen English school teachers. To help facilitate the interviews due to language barriers, the Learning and Evaluation team served as the translators between the teachers and the SIPA team. The data recorded was transcribed and analyzed using NVIVO.

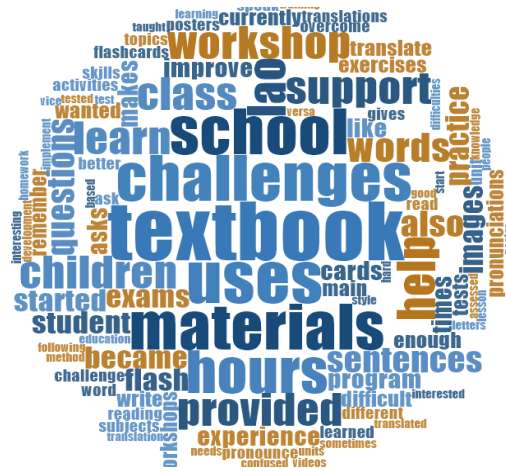


Figure 5: Word Cloud of 300 most common words repeated during teacher interviews
 source: primary survey data analysis in NVIVO

From the interviews it was observed that a common challenge for teachers in both treatment and controls schools, is that they do not have extensive English teaching training. While teachers in the treatment schools received limited training by the Teacher Support programs, those from the control schools have not yet received any support from the government. Teachers from the treatment schools noted that they often use the videos, flashcards and additional materials provided by the Teacher Support program. They value the guidance and the different techniques of classroom, teaching that they receive from PoP. While in the control schools, currently, the

teachers do not receive training from the Teacher Support program, but during the interviews, the teachers expressed their desire to be a part of the program.

Students are taught English two hours a week, where on an average they are tested twice a month through exercises such as English-Lao translations, along with exercises similar to the ones outlined in the textbooks; complete the sentences, match the images, etc. The teachers also pointed out that the students not being exposed to English on a daily basis hindered their progress in the school for English learning. They further noted that learning English is not the priority of the students nor their caregivers compounded by the limited to no exposure of students to English language outside school.

7. Conclusions

The project aimed at developing an English reading assessment tool for 5th-grade students which would help PoP determine the effectiveness of its Teacher Support Program. Although the 5th grade curriculum of English language in Laos primary school captures productive language at the level of communication such as reading phrases and short sentences, based on the results from PoP's previous assessments and the SIPA team's field observation, the team decided to not only measure productive vocabulary, but also test the receptive vocabulary of the students through incorporating sections of object and image recognition in the proposed assessment tool.

The results of pilot showed that the students' have more receptive vocabulary than productive vocabulary. This is well illustrated from the response rate of correct answers across the different sections and versions of the assessment tool. Another layer that supports these results is demonstrated in the word reading section, which documented the fact that hearing the word twice nearly doubles the chances of a student being able to recognize and read a word aloud as opposed to when he/she hears it only once.

For productive vocabulary, from the results of the pilot it was observed that the students in Laos have productive vocabulary mainly through letter reading. It was easier for students to recognize uppercase letters than lower case letters, vowels than consonants, and letters that have same written form in uppercase and lowercase than those that do not. Besides letters, a few of the students were able to read words that they have been exposed to repeatedly over the three years of English learning, such as 'book'. This shows that students have some productive vocabulary in words reading. However, most of the students have not reached a level where they could read short phrases, as expected from the 5th grade textbook curriculum.

8. Discussion and Recommendation

Based on the SIPA team's observations and data analysis, they recommend the following for the development of English reading assessment tool for 5th grade students in Laos. Each of the recommendations correspond to the results and analysis mentioned and explained previously in the conclusions sections.

1. The team recommends that students' receptive vocabulary be assessed on the reading assessment tool. Since the students' current reading level is lower than what is expected to be according to the

5th grade English curriculum, the tool should not only use the 5th grade curriculum, but that it should include 3rd and 4th grade curriculum as well. To assess the receptive vocabulary of the students, sections on *object recognition* and *image recognition* should be included in the final version of the assessment tool, while to test the productive vocabulary, sections on *word reading* and *letter reading* should be included.

- The team recommends that for the object recognition section, a total of six objects should be included, which would also be repeated on the image recognition as well as the word reading sections. Based on the pilot, the following objects should be included: ‘ball’, ‘book’, ‘egg’, ‘pencil’, ‘broom’ and ‘rice’. The team decided not to include ‘apple’ as an object, despite it having a 100% correct response rate was because, the fruit is called by the same name in Lao language and does not add to students’ English vocabulary. The object ‘cap’ was dropped as it was observed that the students often confused it with ‘hat’. Similarly, students often confused ‘pen’ with ‘pencil’ and therefore, the team decided to use ‘pencil’ as an object rather than ‘pen’. The decision to use ‘pencil’ instead of ‘cap/hat’ was in accordance with the school curriculum, as the students are not taught either ‘hat’ in any of the three grades but are exposed to the object ‘pencil’ quite often.

Table 4: Object selection

Objects included	Objects not included
Ball	Apple
Book	Pen
Egg	Cap
Broom	
Rice	
Pencil	

- For the image recognition section, the team recommends that the assessment should have realistic images rather than animated or cartoon graphics. Apart from the six images of the object from the object recognition section, the SIPA team recommends adding four more images of ‘monkey’, ‘dog’, ‘tree’ and ‘fish’. These extra images were decided from the pool of images used during the pilot and since, students often confused the image of a ‘desk’ with a table, it was decided to drop that image from the final assessment. The image of ‘noodles’ was also dropped out since the image did not record any correct responses during the pilot. It is also recommended that the images be arranged in an order that is different from of the object recognition section.

Table 5: Image selection

Images included	Images not included
Ball	Apple
Book	Pen
Egg	Noodles
Broom	Cap
Rice	Desk
Pencil	
Dog	
Fish	
Monkey	
Tree	

4. For the word reading section, the team recommends including all the words that were referenced in the image section and add four new words in the section. In total, there would be six words that the students would have heard twice and four words that they would heard once before they are asked to read it, along with four new words that they have not heard so far from the assessors. The four new words that the SIPA team recommends being added to this section are ‘mother’, ‘no’, ‘red’ and ‘school’. These words were chosen in accordance with the highest correct response rate during the pilot. The word ‘I’ was dropped out despite of having a high response rate as it is also an alphabet and remaining words from the pilot did not have any responses.

Table 6: Word selection

Words included	Words not included
Ball	Apple
Book	I
Egg	Pen
Broom	Cap
Rice	Desk
Pencil	Bed
Dog	Big
Fish	Blue
Monkey	Clock
Tree	Farmer
Mother	Four
No	Hand
Red	July
School	Run
	Skirt
	Sofa

5. Letters are the foundation of words. The team believes that letter recognition is an indispensable part of English language learning and recommends including the letter reading section on the final assessment tool. Based on the results of the pilot, the SIPA team recommends that a total of twelve letters be included; four letters that had the maximum correct response rate (‘a’, ‘z’, ‘o’ and ‘c’), four letters that had the least (‘t’, ‘r’, ‘h’ and ‘g’) and four letters that had a middle range of correct responses (‘x’, ‘u’, ‘v’ and ‘w’). This composition is composed of seven letters that have similar written forms of uppercase and lowercase, and five letters with different forms. There are two vowels and ten consonants. Out of these letters, six would be presented in uppercase and six in lowercase. Since students are more familiar with letters in uppercases, the team decided to have the letters that the students have the lowest response rate for (among the chosen letters), to be tested in their uppercase form (‘V’, ‘W’, ‘T’, ‘R’, ‘H’ and ‘G’) so as to ease out the difficulty level of the letters.

Table 7: Letter selection

Letters included	Letters not included
a	D
z	I
o	K
c	E

Letters included	Letters not included
x	P
u	B
T	S
R	J
H	M
G	
V	
W	









6. Currently, students are not at a reading competency level for sentences, therefore, the SIPA team recommends that the final version has word reading section as the highest level of difficulty for the students to be assessed on. The team also suggests that as the Teacher Support program is developed and implemented in the 5th grade in Laos, a section on *phrase reading* may be included in addition to the already recommended four sections (Appendix-VIII: Final Assessment tool: additional section)
7. Along with the content of the assessment tool, the SIPA team, also recommends the following for the formatting of the tool and conduct of the assessment.
 - a. The sections of the assessment tool should be designed such that image recognition and letter reading sections are on the same side of the page, while word reading section in one entire page, making the assessment one-page test, printed both sides of a paper. This is to not distract the students during the test or overwhelm them with the number of sections of the assessment tool. Each section would also be folded in half during the assessment because of the same reasons. For the tool to be durable and be used more than once, the team suggests that the tool be laminated.
 - b. The SIPA team recommends that the Learning and Evaluation be trained before the application of the tool. The assessment should be conducted in a quiet space with no distractions and especially no other adults or children around.
 - c. The assessor also needs to be mindful of the following:
 - i. The pronunciation of each word on the test, so that the students also hear the correct pronunciation. Practice pronunciations of all the tested words and make sure that every word is spoken out correctly.
 - ii. Before beginning the test, the assessor should make sure that the student is comfortable
 - iii. The assessor should be fully focused on the child and mind-full of his/her responses and reactions to the assessment. The assessor should also be aware of his own reactions. He/she should remain neutral to the students' responses.
 - iv. While grading the student, the assessor should hide the grading sheet, so that the students do not get distracted by their own results and are not affected by the fact that they have answered something incorrectly.

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Appendix-I: Version 1 pilot assessment tool

Objects		Images												
Pen	Book													
Ball	Broom													
Apple	Cap	<small>Version 1 (Pilot)</small>												
Egg	Rice	Letters												
Words		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">U</td> <td style="text-align: center;">S</td> <td style="text-align: center;">z</td> <td style="text-align: center;">x</td> </tr> <tr> <td style="text-align: center;">V</td> <td style="text-align: center;">K</td> <td style="text-align: center;">o</td> <td style="text-align: center;">c</td> <td style="text-align: center;">p</td> </tr> </table>				U	S	z	x	V	K	o	c	p
U	S					z	x							
V	K	o	c	p										
apple	pen	rice	book	<small>Version 1 (Pilot)</small>										
egg	ball	cap	broom	<small>Version 1 (Pilot)</small>										

Appendix-II: Version 2 pilot assessment tool

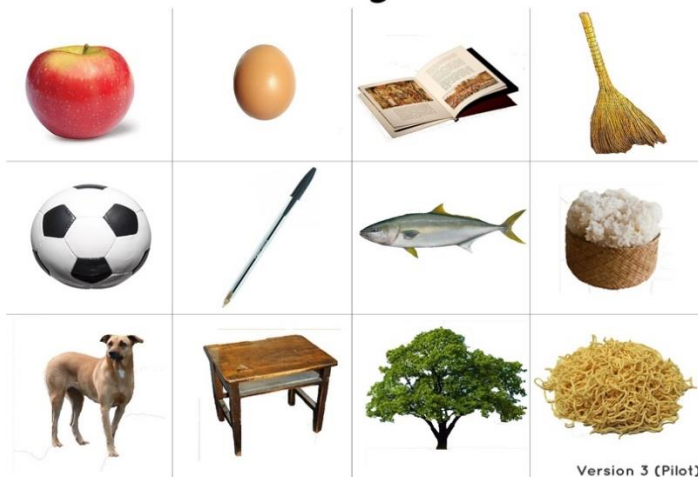
Images			
			
			
			
<small>Version 2 (Pilot)</small>			

Words				Letters					
apple	cap	egg	book	P	A	C	b	i	u
fish	desk	monkey	rice	W	D		e	s	
ball	dog	broom	pen	X	O		g	t	
<small>Version 2 (Pilot)</small>				<small>Version 2 (Pilot)</small>					

Pencils of Promise	Laos Grade 5	Version-2: Pilot
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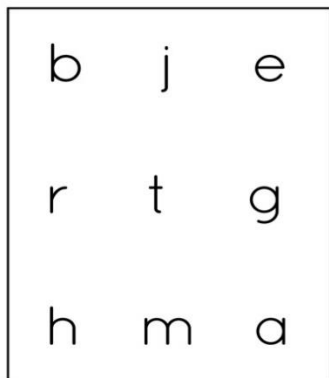
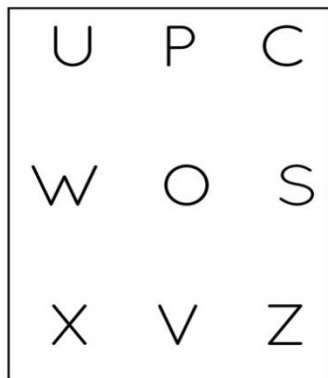
Appendix-III: Version 3 pilot assessment tool

Images



Version 3 (Pilot)

Letters



Version 3 (Pilot)

Words

I	no	four	blue
bed	run	July	skirt
big	red	clock	farmer
hand	sofa	school	mother

Version 3 (Pilot)

Phrases

	feed chicken
go to bed	
	brush teeth
have lunch	
	do homework

Version 3 (Pilot)

Appendix-IV: Pilot assessment administration instructions

Version 1

1. Instructions in *italics* are to be given in the student's local language, otherwise please use English.
 2. Ask each question once. If the student didn't hear it clearly, repeat the question.
 3. Give the student time to respond. If the student does not know the answer, move to the next question.
 4. Students' local pronunciations may vary, therefore, as long as you understand the word, consider it as "correct".
 5. If the student answers correctly, write "1" on the grading sheet, otherwise write "0".
 - a. Correct = 1
 - b. Wrong = 0
-

Objects

1. Place all the objects on the table.
2. Tell the student in their local language:

"I am going to say some words in English, please point them out if you see the object on the table. "

*"Show me **pen**?"*

*"Show me **ball**?"*

*"Show me **apple**?"*

*"Show me **egg**?"*

*"Show me **book**?"*

*"Show me **broom**?"*

*"Show me **cap**?"*

*"Show me **rice**?"*

Images

3. Tell the student in their local language:

"We are done with the first section. Now I am going to show you some images. Please point to the one I call out if you see it."

*"Show me **pen**?"*

“Show me **ball**”?

“Show me **apple**”?

“Show me **egg**”?

“Show me **book**”?

“Show me **broom**”?

“Show me **cap**”?

“Show me **rice**”?

Words

4. Tell the student in their local language:

“We are done with the second section. Now I am going to show you some words in English. Please read the word out loud if you can.”

Point at **apple**. Ask *“Please read this out loud”*

Point at **pen**. Ask *“Please read this out loud”*

Point at **egg**. Ask *“Please read this out loud”*

Point at **ball**. Ask *“Please read this out loud”*

Point at **rice**. Ask *“Please read this out loud”*

Point at **book**. Ask *“Please read this out loud”*

Point at **cap**. Ask *“Please read this out loud”*

Point at **broom**. Ask *“Please read this out loud”*

Letters

5. Tell the student in their local language:

“This is the final section. Now I am going to show you some English letters. Please read the letter out loud if you can.”

Point at **U**. Ask *“Please read this out loud”*

Point at **S**. Ask *“Please read this out loud”*

Point at **V**. Ask *“Please read this out loud”*

Point at **K**. Ask *“Please read this out loud”*

Point at **W**. Ask *“Please read this out loud”*

Point at **z**. Ask *“Please read this out loud”*

Point at **x**. Ask *“Please read this out loud”*

Point at **o**. Ask *“Please read this out loud”*

Point at **c**. Ask *“Please read this out loud”*

Point at **p**. Ask *“Please read this out loud”*

6. Tell the student in their local language:

“We have finished, thank you.”

Version 2

1. Instructions in *italics* are to be given in the student's local language, otherwise please use English.
 2. Ask each question once. If the student didn't hear it clearly, repeat the question.
 3. Give the student time to respond. If the student does not know the answer, move to the next question.
 4. Students' local pronunciations may vary, therefore, as long as you understand the word, consider it as "correct".
 5. If the student answers correctly, write "1" on the grading sheet, otherwise write "0".
 - a. Correct = 1
 - b. Wrong = 0
-

Images

1. Tell the student in their local language:

"I am going to show you some images. Please point to the one I call out if you see it."

*"Show me **apple**"?*

*"Show me **desk**"?*

*"Show me **cap**"?*

*"Show me **ball**"?*

*"Show me **fish**"?*

*"Show me **dog**"?*

*"Show me **pen**"?*

*"Show me **egg**"?*

*"Show me **book**"?*

*"Show me **rice**"?*

*"Show me **broom**"?*

*"Show me **monkey**"?*

Words

2. Tell the student in their local language:

"We are done with the first section. Now I am going to show you some words in English. Please read the word out loud if you can."

Point at **apple**. Ask *“Please read this out loud”*.

Point at **cap**. Ask *“Please read this out loud”*.

Point at **fish**. Ask *“Please read this out loud”*.

Point at **desk**. Ask *“Please read this out loud”*.

Point at **ball**. Ask *“Please read this out loud”*.

Point at **dog**. Ask *“Please read this out loud”*.

Point at **egg**. Ask *“Please read this out loud”*.

Point at **book**. Ask *“Please read this out loud”*.

Point at **monkey**. Ask *“Please read this out loud”*.

Point at **rice**. Ask *“Please read this out loud”*.

Point at **broom**. Ask *“Please read this out loud”*.

Point at **pen**. Ask *“Please read this out loud”*.

Letters

3. Tell the student in their local language:

“This is the final section. Now I am going to show you some English letters. Please read the letter out loud if you can.”

Point at **P**. Ask *“Please read this out loud”*.

Point at **A**. Ask *“Please read this out loud”*.

Point at **C**. Ask *“Please read this out loud”*.

Point at **W**. Ask *“Please read this out loud”*.

Point at **D**. Ask *“Please read this out loud”*.

Point at **X**. Ask *“Please read this out loud”*.

Point at **O**. Ask *“Please read this out loud”*.

Point at **b**. Ask *“Please read this out loud”*.

Point at **i**. Ask *“Please read this out loud”*.

Point at **u**. Ask *“Please read this out loud”*.

Point at **e**. Ask *“Please read this out loud”*.

Point at **s**. Ask *“Please read this out loud”*.

Point at **g**. Ask *“Please read this out loud”*.

Point at **t**. Ask *“Please read this out loud”*.

4. Tell the student in their local language:

“We have finished, thank you.”

Version 3 (letters)

1. Instructions in *italics* are to be given in the student's local language, otherwise please use English.
 2. Ask each question once. If the student didn't hear it clearly, repeat the question.
 3. Give the student time to respond. If the student does not know the answer, move to the next question.
 4. Students' local pronunciations may vary, therefore, as long as you understand the word, consider it as "correct".
 5. If the student answers correctly, write "1" on the grading sheet, otherwise write "0".
 - a. Correct = 1
 - b. Wrong = 0
-

Images

1. Tell the student in their local language:

"I am going to show you some images. When I point to the image, please tell me the word in English if you can."

Point at **apple**. Ask *"What is this?"*.

Point at **egg**. Ask *"What is this?"*.

Point at **ball**. Ask *"What is this?"*.

Point at **pen**. Ask *"What is this?"*.

Point at **dog**. Ask *"What is this?"*.

Point at **desk**. Ask *"What is this?"*.

Point at **book**. Ask *"What is this?"*.

Point at **broom**. Ask *"What is this?"*.

Point at **fish**. Ask *"What is this?"*.

Point at **rice**. Ask *"What is this?"*.

Point at **tree**. Ask *"What is this?"*.

Point at **noodles**. Ask *"What are these?"*.

Words

2. Tell the student in their local language:

"We are done with the first section. Now I am going to show you some words in English. Please read the word out loud if you can."

Point at **I**. Ask “*Please read this out loud*”.

Point at **no**. Ask “*Please read this out loud*”.

Point at **bed**. Ask “*Please read this out loud*”.

Point at **run**. Ask “*Please read this out loud*”.

Point at **big**. Ask “*Please read this out loud*”.

Point at **red**. Ask “*Please read this out loud*”.

Point at **hand**. Ask “*Please read this out loud*”.

Point at **sofa**. Ask “*Please read this out loud*”.

Point at **four**. Ask “*Please read this out loud*”.

Point at **blue**. Ask “*Please read this out loud*”.

Point at **July**. Ask “*Please read this out loud*”.

Point at **skirt**. Ask “*Please read this out loud*”.

Point at **clock**. Ask “*Please read this out loud*”.

Point at **farmer**. Ask “*Please read this out loud*”.

Point at **school**. Ask “*Please read this out loud*”.

Point at **mother**. Ask “*Please read this out loud*”.

Letters

3. Tell the student in their local language:

“This is the final section. Now I am going to show you some English letters. Please read the letter out loud if you can.”

Point at **U**. Ask “*Please read this out loud*”.

Point at **P**. Ask “*Please read this out loud*”.

Point at **C**. Ask “*Please read this out loud*”.

Point at **W**. Ask “*Please read this out loud*”.

Point at **O**. Ask “*Please read this out loud*”.

Point at **S**. Ask *“Please read this out loud”*.

Point at **X**. Ask *“Please read this out loud”*.

Point at **V**. Ask *“Please read this out loud”*.

Point at **Z**. Ask *“Please read this out loud”*.

Point at **b**. Ask *“Please read this out loud”*.

Point at **j**. Ask *“Please read this out loud”*.

Point at **e**. Ask *“Please read this out loud”*.

Point at **r**. Ask *“Please read this out loud”*.

Point at **t**. Ask *“Please read this out loud”*.

Point at **g**. Ask *“Please read this out loud”*.

Point at **h**. Ask *“Please read this out loud”*.

Point at **m**. Ask *“Please read this out loud”*.

Point at **a**. Ask *“Please read this out loud”*.

4. Tell the student in their local language:

“We have finished, thank you.”

Version 3 (phrases)

1. Instructions in *italics* are to be given in the student's local language, otherwise please use English.
 2. Ask each question once. If the student didn't hear it clearly, repeat the question.
 3. Give the student time to respond. If the student does not know the answer, move to the next question.
 4. Students' local pronunciations may vary, therefore, as long as you understand the word, consider it as "correct".
 5. If the student answers correctly, write "1" on the grading sheet, otherwise write "0".
 - a. Correct = 1
 - b. Wrong = 0
-

Images

1. Tell the student in their local language:

"I am going to show you some images. When I point to the image, please tell me the word in English if you can."

Point at **apple**. Ask *"What is this?"*.

Point at **egg**. Ask *"What is this?"*.

Point at **ball**. Ask *"What is this?"*.

Point at **pen**. Ask *"What is this?"*.

Point at **dog**. Ask *"What is this?"*.

Point at **desk**. Ask *"What is this?"*.

Point at **book**. Ask *"What is this?"*.

Point at **broom**. Ask *"What is this?"*.

Point at **fish**. Ask *"What is this?"*.

Point at **rice**. Ask *"What is this?"*.

Point at **tree**. Ask *"What is this?"*.

Point at **noodles**. Ask *"What are these?"*.

Words

2. Tell the student in their local language:

"We are done with the first section. Now I am going to show you some words in English. Please read the word out loud if you can."

Point at **I**. Ask “*Please read this out loud*”.

Point at **no**. Ask “*Please read this out loud*”.

Point at **bed**. Ask “*Please read this out loud*”.

Point at **run**. Ask “*Please read this out loud*”.

Point at **big**. Ask “*Please read this out loud*”.

Point at **red**. Ask “*Please read this out loud*”.

Point at **hand**. Ask “*Please read this out loud*”.

Point at **sofa**. Ask “*Please read this out loud*”.

Point at **four**. Ask “*Please read this out loud*”.

Point at **blue**. Ask “*Please read this out loud*”.

Point at **July**. Ask “*Please read this out loud*”.

Point at **skirt**. Ask “*Please read this out loud*”.

Point at **clock**. Ask “*Please read this out loud*”.

Point at **farmer**. Ask “*Please read this out loud*”.

Point at **school**. Ask “*Please read this out loud*”.

Point at **mother**. Ask “*Please read this out loud*”.

Phrases

3. Tell the student in their local language:

“This is the final section. Now I am going to show you some phrases in English. Please read them out loud if you can.”

Point at **go to bed**. Ask “*Please read this out loud*”.

Point at **have lunch**. Ask “*Please read this out loud*”.

Point at **feed chicken**. Ask “*Please read this out loud*”.

Point at **brush teeth**. Ask “*Please read this out loud*”.

Point at **do homework**. Ask “*Please read this out loud*”.

4. Tell the student in their local language:

“We have finished, thank you.”

Appendix-V: Pilot assessment grading matrix

Version: 1	
School name:	
Student number:	
Gender:	
Age:	

Objects		
1	Pen	
2	Ball	
3	Apple	
4	Egg	
5	Book	
6	Broom	
7	Cap	
8	Rice	

Images		
1	Pen	
2	Ball	
3	Apple	
4	Egg	
5	Book	
6	Broom	
7	Cap	
8	Rice	

Words		
1	Apple	
2	Pen	
3	Egg	
4	Ball	
5	Rice	
6	Book	
7	Cap	
8	Broom	

Letters		
1	U	
2	S	
3	V	
4	K	
5	W	
6	z	
7	x	
8	o	
9	c	
10	p	

Version: 2

School name:

Student number:

Gender:

Age:

Images

Images		
1	Apple	
2	Desk	
3	Cap	
4	Ball	
5	Fish	
6	Dog	
7	Pen	
8	Egg	
9	Book	
10	Rice	
11	Broom	
12	Monkey	

Words

Words		
1	Apple	
2	Cap	
3	Fish	
4	Desk	
5	Ball	
6	Dog	
7	Egg	
8	Book	
9	Monkey	
10	Rice	
11	Broom	
12	Pen	

Letters

Letters		
1	P	
2	A	
3	C	
4	W	
5	D	
6	X	
7	O	
8	b	
9	i	
10	u	
11	e	
12	s	
13	g	
14	t	

Version: 3 (letters)

School name:

Student number:

Gender:

Age:

Images		
1	Apple	
2	Egg	
3	Ball	
4	Pen	
5	Dog	
6	Desk	
7	Book	
8	Broom	
9	Fish	
10	Rice	
11	Tree	
12	Noodles	

Words		
1	I	
2	no	
3	bed	
4	run	
5	big	
6	red	
7	hand	
8	sofa	
9	four	
10	blue	
11	July	
12	skirt	
13	clock	
14	farmer	
15	school	
16	mother	

Letters		
1	U	
2	P	
3	C	
4	W	
5	O	
6	S	
7	X	
8	V	
9	Z	
10	b	
11	j	
12	e	
13	r	
14	t	
15	g	
16	h	
17	m	
18	a	

Version: 3 (phrases)

School name:

Student number:

Gender:

Age:

Images

1	Apple	
2	Egg	
3	Ball	
4	Pen	
5	Dog	
6	Desk	
7	Book	
8	Broom	
9	Fish	
10	Rice	
11	Tree	
12	Noodles	

Words

1	I	
2	no	
3	bed	
4	run	
5	big	
6	red	
7	hand	
8	sofa	
9	four	
10	blue	
11	July	
12	skirt	
13	clock	
14	farmer	
15	school	
16	mother	

Phrases

1	go to bed	
2	have lunch	
3	feed chicken	
4	brush teeth	
5	do homework	

Appendix-VI: Pilot results for different sections

Objects		Words		Letters	
Item	% of correct answers	Item	% of correct answers	Item	% of correct answers
Apple	100%	Apple	44%	A	91%
Ball	55%	Book	28%	z	67%
Book	55%	I	20%	o	62%
Egg	52%	Monkey	16%	Z	53%
Pen	50%	Egg	14%	O	51%
Broom	33%	Pen	14%	C	48%
Rice	31%	Dog	14%	c	43%
Cap	24%	Ball	13%	D	41%
Images		Fish	9%	i	34%
Item	% of correct answers	Broom	6%	K	33%
Apple	90%	mother	5%	W	30%
Dog	69%	Cap	5%	X	29%
Ball	58%	Rice	5%	a	28%
Book	52%	no	3%	U	27%
Cap	45%	red	3%	V	23%
Egg	43%	school	3%	u	23%
Monkey	36%	Desk	2%	x	21%
Fish	32%	bed	0%	e	21%
Pen	28%	big	0%	P	21%
Broom	23%	blue	0%	b	15%
Rice	23%	clock	0%	S	15%
Desk	13%	farmer	0%	s	14%
Tree	10%	four	0%	p	12%
Noodles	3%	hand	0%	j	10%
Phrases		July	0%	m	5%
Item	% of correct answers	run	0%	g	5%
go to bed	0%	skirt	0%	h	3%
have lunch	0%	sofa	0%	r	3%
feed chicken	0%			t	1%
brush teeth	0%				
do homework	0%				

Appendix-VII: Final Assessment tool

		V G T W H R	Z C X a U O
			
			
			
			

Pencils of Promise

Laos Grade 5

dog monkey

pencil red

book tree

rice

broom no

ball mother

egg fish

school

Appendix-VIII: Final Assessment tool: additional section

<p>go to bed</p> <p>have lunch</p>	<p>feed chicken</p> <p>brush teeth</p> <p>do homework</p>
<p>Pencils of Promise</p>	<p>Laos Grade 5</p>

Appendix-IX: Final assessment administration instructions

1. Instructions in *italics* are to be given in the student's local language, otherwise please use English.
 2. Ask each question once. If the student didn't hear it clearly, repeat the question.
 3. Give the student time to respond. If the student does not know the answer, move to the next question.
 4. Students' local pronunciations may vary, therefore, as long as you understand the word, consider it as "correct".
 5. If the student answers correctly, write "1" on the grading sheet, otherwise write "0".
 - a. Correct = 1
 - b. Wrong = 0
-

Objects

1. Place all the objects on the table.
2. Tell the student in their local language:

"I am going to say some words in English, please point them out if you see the object on the table."

*"Show me **pencil**"?*

*"Show me **broom**"?*

*"Show me **egg**"?*

*"Show me **book**"?*

*"Show me **ball**"?*

*"Show me **rice**"?*

Images

3. Tell the student in their local language:

"We are done with the first section. Now I am going to show you some images. Please point to the one I call out if you see it."

*"Show me **ball**"?*

*"Show me **book**"?*

*"Show me **egg**"?*

*"Show me **broom**"?*

“Show me **rice**”?

“Show me **dog**”?

“Show me **fish**”?

“Show me **monkey**”?

“Show me **tree**”?

“Show me **pencil**”?

Words

4. Tell the student in their local language:

“We are done with the second section. Now I am going to show you some words in English. Please read the word out loud if you can.”

Point at **dog**. Ask *“Please read this out loud”*

Point at **monkey**. Ask *“Please read this out loud”*

Point at **pencil**. Ask *“Please read this out loud”*

Point at **red**. Ask *“Please read this out loud”*

Point at **book**. Ask *“Please read this out loud”*

Point at **tree**. Ask *“Please read this out loud”*

Point at **rice**. Ask *“Please read this out loud”*

Point at **broom**. Ask *“Please read this out loud”*

Point at **no**. Ask *“Please read this out loud”*

Point at **ball**. Ask *“Please read this out loud”*

Point at **mother**. Ask *“Please read this out loud”*

Point at **egg**. Ask *“Please read this out loud”*

Point at **fish**. Ask *“Please read this out loud”*

Point at **school**. Ask *“Please read this out loud”*

Letters

5. Tell the student in their local language:

“This is the final section. Now I am going to show you some English letters. Please read the letter out loud if you can.”

Point at **V**. Ask *“Please read this out loud”*

Point at **G**. Ask *“Please read this out loud”*

Point at **T**. Ask *“Please read this out loud”*

Point at **W**. Ask *“Please read this out loud”*

Point at **H**. Ask *“Please read this out loud”*

Point at **R**. Ask *“Please read this out loud”*

Point at **z**. Ask *“Please read this out loud”*

Point at **c**. Ask *“Please read this out loud”*

Point at **x**. Ask *“Please read this out loud”*

Point at **a**. Ask *“Please read this out loud”*

Point at **u**. Ask *“Please read this out loud”*

Point at **o**. Ask *“Please read this out loud”*

6. Tell the student in their local language:

“We have finished, thank you.”

Appendix-X: Final assessment grading matrix

General Information	
School name:	
Student number:	
Gender:	
Age:	

Objects	
1	Pencil
2	Broom
3	Egg
4	Book
5	Ball
6	Rice

Images	
1	Ball
2	Book
3	Egg
4	Broom
5	Rice
6	Dog
7	Fish
8	Monkey
9	Tree
10	Pencil

Words	
1	Dog
2	Monkey
3	Pencil
4	Red
5	Book
6	Tree
7	Rice
8	Broom
9	No
10	Ball
11	Mother
12	Egg
13	Fish
14	School

Letters	
1	V
2	G
3	T
4	W
5	H
6	R
7	z
8	c
9	x
10	a
11	u
12	o