Global Dream and Teachers Without Borders

BUILDING A PEOPLE'S MOVEMENT FOR FOUNDATIONAL LITERACY: A RESEARCH CASE

AUTHORS: Baiden-Amissah, Daniel Payne
Mednick, Fred
Moldonado, Jaime Alvarez
Jelena Obradovic
Petrovic, Uros
Souiri, Ismail
Teffaha, Yara

Table of Contents

INTRODUCTION to GLOBAL LITERACY CHALLENGE

The challenges facing our world cannot be addressed by policy-makers alone. Today, we face a global pandemic, a global climate crisis, and rising tensions between global, nuclear powers. These cascading (and often intersecting) emergencies require coordinated action by a groundswell of readers. You heard that right - readers. One's inability to read — to *truly* read and *understand* what one reads is just about a guarantee that one remains in poverty, vulnerable to society's seismic upheavals. Illiteracy is directly tied to human trafficking, political abuse, and exploitation.

This research paper provides the underpinnings of a sea change by combining low-to-no cost solutions to accelerated reading proficiency, and lessons learned from building a literate world at scale.

According to UNESCO, there are 773 million youth and adults who cannot read and 250 children who lack basic reading skills (UNESCO, n.d.). While in the article "The urgent need to focus on foundational skills" (Herbert et al., 2021), prior to the pandemic, 53 percent of children living in low- and middle-income countries lived in learning poverty, that is, they do not know how to read in grade 3 of primary education. According to Mr. Robert Jenkins, Global Director, Education and Adolescent Development, UNICEF, up to 70 percent (Global Dream, 2022) of the children who come from low and middle income countries do not know how to read at the age of 10, that is, there has been a rise of 17 percent. from the year 2020. In the Report "the state of global education crisis" (The Word Bank et al., 2021) It is explained how prior to the pandemic there were already 258 million children outside the school system and how the closure of schools affected 1.6 billion children, generating an increase in learning poverty, which varies between 63 and 70 percent, depending on the proposed scenario with updated data (The World Bank et al, 2021). In detail, the effect of the close of the schools has result in the loss of between 3 and 7 month of learning (Azevedo et al, 2021)

SUSTAINABLE DEVELOPMENT GOAL (SDG) 4.1 and 4.6: CHALLENGES

As a sector, education has the potential to assist, facilitate, and contribute to the attainment of all the SDGs (Ahmadein, 2019). Recognizing the centrality of education in our lives, the United Nations Sustainable Development Goal (SDG) 4 calls on countries to 'ensure inclusive and equitable quality education and promote lifelong learning opportunities for all' (UNESCO, UNFPA, UNICEF UN, 2015). Literacy is seen as indispensable for the achievement of the other 16 SDGs, such as gender equality and active citizenship (McKay, 2018). The ideas, approaches, and activities for this goal are "bolstered by a current perspective of literacy as a continuous spectrum of skill levels'' that "depend on specific settings," rather than a simple dichotomy of "literate" and "illiterate. 'The aim is that by 2030, all young people and adults around the world shall have acquired meaningful and recognized competence levels in functional literacy and numeracy competencies that are commensurate to levels attained after successful completion of primary education,' per the goal.

SDG-4 targets 4.1 and 4.6 support the capacity of individuals to participate in change at different levels and accelerate progress toward achieving learning outcomes in the cognitive, social,

emotional and behavioral fields that enable individuals to deal with the challenges posed by each of the SDGs, thus facilitating their achievement. Literacy is fundamental and foundational to any effort.

Evidence of the cross-sectoral correlation between education and overall development is explicitly clear. An educated mother had become 50% more likely to immunize her child than a mother without an education (PRB, 2021). With an extra year of education, a girl could earn up to 20% more as an adult and often would reinvest 90% of her income into her family (USAID Infographic). Children born to literate mothers were far more likely to survive past the age of five (Lancet, 2021). Advances in women's education had prevented more than 4 million child deaths (CARE).

However, the full capacity of literacy can only be realized through a lifelong learning strategy, hence literacy instructional strategies should be included in a lifelong learning framework. The Sustainable Development Goals (SDGs) have become a global concept, with governments, organizations, and now even individual citizens bearing responsibility for their implementation. As a result, it is necessary to evaluate people's perception of these goals to bolster any successive measures related to their successful execution. (Alomari & Khataybeh, 2021).

SDG 4.1

Under the UN's Sustainable Development goals, all girls and boys should complete free, equitable, and quality education until age 18 by 2030. This is an ambitious goal and now stretches to include secondary education as well as primary (King, 2017) .

The targets of SDG 4 on education are specific and measurable and contribute directly to achieving the overarching goal (UNESCO et al., 2015). They spell out a global level of ambition that should encourage countries to strive for accelerated progress. All countries are required to follow them. They take into account the national realities, capacities, levels of development, and national policies and priorities. Country-led action will drive change, supported by effective multi-stakeholder partnerships and financing. Governments are expected to translate global targets into achievable national targets based on their education priorities, national development strategies and plans, the ways their education systems are organized, their institutional capacity, and the availability of resources.

Target 4.1 of the Sustainable Development Goals (SDGs) requires a holistic approach, as do the other SDG 4 targets (Grainger-Brown & Malekpour, 2019). To ensure equal access to education for all, a minimum of 12 years of free, publicly funded, inclusive, equitable, and high-quality primary and secondary education, with at least nine years of compulsory instruction leading to relevant learning outcomes, should be provided. Equally important is the equity dimension when it comes to education. Here, policies should be established to address the uneven distribution of learning opportunities and outcomes across nations, regions, households, local communities, and, most importantly, in diverse schools and classrooms. Addressing inequality and ensuring inclusion in the provision and quality education outcomes requires deepening the understanding of teaching and learning in a given learning environment.

As a result, to ensure that this goal is met, the creation of specific tools will strategically drive it forward in its execution (UNESCO, UNFPA, UNICEF, 2015), such as:

- Nations should raise the number of years of free and compulsory education to meet global standards while taking into consideration diverse national realities, capacities, and degrees of development, as well as national strategies and priorities.

- Establish a framework and evaluate curricula to ensure that they are of good quality and relevant to the context, including skills, competencies, values, culture, knowledge, and gender responsiveness.

- Design more rigorous, comprehensive evaluation systems that reflect both cognitive and non-cognitive skills to evaluate learning outcomes at important periods, such as during and after primary and secondary education. Evaluations of core reading, writing, and numeracy skills, as well as non-cognitive skills, should be included. Design formative assessments as a key component of the teaching and learning process at all levels, with a clear pedagogical link.

- Strengthen the efficiency and effectiveness of institutions, school leadership, and governance through greater involvement of communities, including young people and parents, in the management of schools.

Spatially enabled societies encourage the collection and processing of spatial information at all levels of society to deliver sustainable development goals. Therefore, the integration of spatial information and sustainable development can facilitate coherent governance, ensure coverage of more geographic territories, and engage a larger number of citizens in determining the future of their society.

SDG 4.6

SDG 4.6 mandates Member Nations to guarantee that all youth and a significant number of adults, both men and women, achieve literacy and numeracy (Hanemann, 2019). The global indicator for Target 4.6, and the only indicator specifically linked to measuring learning outcomes, is indicator 4.6.1, which evaluates "the proportion of the population in a given age group achieving at least a set level of competency in operational literacy and numeracy skills.

To develop, adapt, and engage in social, intellectual, cultural, and civic life in today's fast-changing world, everyone needs a broad level of knowledge, capabilities, and skills, including mastery in literacy, numeracy, and digital competency (Sefton et al, 2016). Literacy refers to the capacity to read, write, speak, and listen in a way that allows individuals to successfully interact and make meaning (Lewis, Jones & Baker, 2012). Specifically, it refers to the ability to understand, analyze, use, and produce written and visual information through a variety of formats for a wide range of purposes. Literacy is a learning process with different skill levels. Literacy development occurs prior, during, and after preschool, in and out of the classroom, and through formal, non-formal, and informal learning, throughout a person's life. It is never too early or too late to begin learning literacy and numeracy. Aligning literacy to economic, social, and cultural activities that people need and want to develop in their everyday lives creates needs and priorities for the use, advancement, and retention of literacy abilities, making them lasting (Malik,

2018). Numeracy is a broad term that relates to a person's capacity to acquire, use, analyze, and express numerical information and concepts to engage in and handle arithmetic demands in a variety of circumstances. It includes the capacity to employ numerical methods, logic, and modeling in both real-world and digital settings.

Literacy and numeracy are fundamental not only for achieving this goal and the ten related targets outlined in the Education 2030 Framework for Action but also for fulfilling the other 16 SDGs (Hanemann, 2019). Literacy and numeracy, on the other hand, can only fully realize their possibility to "change our world" if they are addressed from a lifelong learning perspective. (Hanemann, 2015) and brought closer to people's lives through integrated, multi-sectoral approaches that draw the focus from supply to demand. Achieving this means working towards 'literate families', 'literate communities' and 'literate societies' made up of independent, confident, and effective lifelong learners.

Given this larger perspective, literacy is a necessary precondition for poverty alleviation, engagement, and long-term development. National development policies should prioritize marginalized populations' inclusion and community-based literacy techniques for long-term development. Youth and adult literacy programs yield benefits that go beyond those made explicit in the SDGs, such as increased self-esteem, empowerment, openness to change, and resumption of learning. Literacy and education are essential for encouraging diverse tolerance and preventing conflict.

Literacy necessitates a learning continuity in which newly acquired skills are regularly updated and enhanced, allowing learners to cope with new activities and adjust to changing environments. Literacy is critical in assisting people in attaining their goals, developing their knowledge and skills, and fully participating in their communities. It lays the groundwork for full and active participation in many elements of social life.

Numeracy is a comprehensive, multifaceted concept that refers to a collection of information and abilities that influence a person's numeracy conduct. It is vital to guarantee that learners can confidently apply numeracy abilities in a variety of situations, responses, elements, expression, cognitive and non-cognitive processes to develop numerate conduct.

SDG 4.6 is hinged on the level of proficiency in functional literacy and numeracy skills. This functionality of literacy or numeracy proficiency grants the youth and adults a reasonable probability of realizing their goals by coping with familiar and unfamiliar tasks in everyday life. As a result, literacy and numeracy should be fostered as part of a lifelong learning strategy, so that they can fully realize their potential to change the world.

Challenges

There is now widespread consensus that progress toward SDG-4 (Grainger-Brown & Malekpour, 2019), including reaching its seven targets and three drivers, is important to any nation's long-term development. Many experts in the international development community concur that we are not on track to reach the SDG-4 targets. As research shows, most developing nations are falling behind in their pursuit of SDG-4. This emerging global agreement emphasizes the

importance of performing critical assessments of the causes that hinder the pursuit and attainment of this goal and its target in its entirety in each country.

When it comes to making progress on SDG-4, the international community and development partners face several challenges which will be explained in the following sections.

The Issue of funding

To a considerable extent, it is assumed that appropriate education funding at all levels influences the educational system's quality. Adequate funding for SDG-4 activities and programs has surfaced as a challenge at all levels, from global policy to field implementation (Fergusson & Roofe, 2020). Over the last ten years, global education aid has been flat. Several of our contributors observed "funding fatigue", or waning interest from donors when they do not see immediate progress and outcomes from a program (Ikpa, 2016). As a result, there is a desire for a more coordinated finance system that brings together the major funding sources so that global funding is distributed more broadly at the national level. At the global level, financing for SDG-4 has been promised by multilateral and bilateral donors, however, the funding for SDG-4 programs is not allocated to programs before design, leaving NGOs and implementing multilateral agencies to go searching for funding after governments have agreed to have a project implemented in their country. This often results in multiple agencies, NGOs, and Civil Society Organisations (CSOs) , even ones operating within the same country competing for funds and detracting from program delivery. At the country level, there is a question of government funding priorities especially when it comes to where governments are focusing the budgets they do have. For some countries, a shift in government spending priorities could tilt the balance of funding needed to meet education targets.

As finance is an issue at all levels, many people in different countries lament that even when money is received, they do not always get to the field and places where they are most needed. Since regional and country contexts are so different regarding the greatest needs for educational investment across each of the SDG-4 targets, there is a lack of coherent allocation of funds and implementation of funded programs cascading from the global to the national to the community level. For some implementers, the challenge lies in determining whether to invest in early childhood, pre-primary, primary, secondary, or tertiary education. Others face the problem of investing in breakthrough technologies that could improve access to education in nations where the infrastructure to support such technology is lacking. The priority for others is to fund advocacy programs to increase the value placed on education at the community and national level, especially for marginalized communities. All these are a few instances of high-priority regions where financial assistance is required to accelerate progress toward educational goals.

Inconsistent Programme Execution at the Ministry/Field Level

Another frequently mentioned issue is some development organizations' propensity to approach SDG-4 target-by-target, program-by-program while working within countries. When international organizations introduce programs to education ministries that work on one issue at a time (targeting inclusion, infrastructure, and global citizenship separately, for example), ministries are overloaded with requests to develop new policies, change and reform what is already in place, or

contribute new funding. For education ministries, this becomes too time-consuming, exorbitant, and impractical. Many countries have a strong education policy but a bad strategy when it comes to implementing it. They don't have a step-by-step plan for integrating high-quality, relevant content into the curriculum, or for retaining and developing teacher ability. It's critical to work more specifically on strategy so that policy can be applied down to the school level. What will be important for development organizations is to work within the right governance structures, understand the pace of change, and introduce programs with the right tools to address issues in education holistically, in a way that can translate into an issues-based approach on the ground.

Inconsistent Monitoring and Evaluation of Programmes

SDG-4 targets are not consistently used to inform goal-setting or measurement across governments and ministries, either because ministries and donors at the implementation level are not interested in the types of data that reflect the SDG-4 targets around quality education, or because any alignment in indicators exists without explicit reference to SDG-4. In practice, this means that donor money is spent on education indicators that don't allow for continual improvement or strategic resource allocation decisions. However, because education progress measurements are not used consistently across multilateral funders, implementing NGOs, governments, and education ministries, it is difficult to acquire buy-in for a single metric or collection of indicators to track success and best practices. There is some voice for ground-up development of indicators, but there's a real disconnect in the type of data being collected from the local to the global level, and a lack of coherent, systems-based approaches to monitoring education progress and making data-informed decisions to improve that progress.

Women and Girls' Education

Many program implementers talked about the importance of cultural attitudes about education in their work. It's more challenging to enroll children in school in places where education is undervalued. This is especially true for young girls because girls' and women's education is not valued in some cultures. Women may not have the economic opportunity after they finish school, because they will face resistance when joining the workforce. SDG-4 targets aims are inextricably tied to issues of girls' and women's rights. Girls who marry young are more likely to drop out of school, and girls already out of school and who are at low levels of education are more likely to marry young. In some locations, pregnant or young girls may be prevented from entering the school entirely. In countries such as Tanzania, for example, there are specific laws, policies, or practices that require girls who are pregnant to leave school or that don't allow young mothers back into school. Keeping girls in school from primary through secondary education is a huge challenge for many organizations. Child marriage plays a huge part in this. Parents may put a lot of pressure on their daughters to support their families sooner or marry at a young age so that they can be financially supported. In many contexts, when girls are married at a young age they have children of their own very soon afterward, as cultural norms dictate.

The result is that girls are not able to access or return to education, making them vulnerable for the rest of their lives and reinforcing the cycle of poverty and low education rates. Furthermore, transitioning to secondary school might be difficult for girls if their local schools lack adequate bathroom facilities for menstrual hygiene. There is not always education in a place that can

empower girls to understand their bodies and how to navigate sexuality. Making sure schools have safe and private toilets with sanitation to allow them to manage their menstrual hygiene influences whether they will remain in secondary school. Aside from social pressures, girls may avoid going to school due to the threat of abuse from teachers and peers. Some parents stop sending girls to school because they are not safe either on or on the way to school. For example, in Niger, which has the world's highest child marriage rate (76%), one of the main reasons for marrying off girls rather than sending them to secondary school was because secondary school was unsafe.

In some situations, where young professional women confront resistance from communities, gender discrimination is a concern for both students and teachers. This becomes a problem at the field implementation level where women looking to provide education access in remote areas are not allowed to travel or work alone, or where women must travel with a chaperone, but male chaperones are not allowed in classrooms for girls and women. This issue becomes cyclical since biases are overcome through education and the provision of education access.

Barriers to Access

Physical and financial access to education is a problem in developing countries, and to a lesser extent in developed countries. Enrollment barriers exist at all levels of education, including at the basic level in some cases. In many countries or fragile settings, children don't have the basic documentation required to enroll in schools. Given the rise in internal and international migration, it's difficult to create a truly inclusive education system when people are compelled to miss school for a variety of reasons. Schools may also be too far from home for students, or they may not have safe transportation to get there. Secondary schools may also have fees and expenditures that prevent families from taking their children to school if they cannot pay them. It is critical to build more schools in rural locations to achieve universal education since there are significant barriers to access when secondary schools are located far away from isolated villages. Furthermore, when children transition from primary to secondary school without having acquired basic knowledge from primary school, achieving learning outcomes in secondary school becomes more difficult, and dropout rates are higher. Foundational skills are a significant issue in the adolescent context, because if they don't have basic literacy and numeracy capacity, then trying to build on that and help them develop transferable skills, life skills and job skills is challenging. There has been a shift in focus in recent years towards adolescent education because bridging primary education to adolescent education and preparing students for vocations and sustainable livelihoods links all the education targets together in an effective, relevant way (Hughes, 2005).

The World Bank's goal of halving learning poverty by 2030 is unmistakably a response to several other global challenges and complexities connected with meeting the SDG-4 targets by 2030 (DEval, 2019). There is no doubt that re-engagement and catalyzing action are needed to accelerate progress on achieving SDG-4. The work the World Bank is doing to create better monitoring and evaluation systems has the potential to address the urgent need for measurable, scalable indicators that can be taken on by all governments, donors, and implementers. For contexts where government engagement, infrastructure, and access to schools are still

overarching issues, the World Bank objective could be the best way forward, if it is carried out in the spirit of SDG-4, where efforts to halve learning poverty are inclusive, considered from a whole-system approach, and considerate of cross-cutting issues in global education.

The proof of the pudding will, of course, be in the eating. The measure of the success of the SDGs will be whether the goal Education 2030: 'Towards equitable quality education and lifelong education for all is substantially achieved by 2030 and how far the overall development agenda has progressed by that date(Uvalic-Trumbic & Daniel, 2016).

The SDGs are a non-binding agreement and countries are expected to set their own priorities and target values. Their implementation will primarily take place at the national level, following the generic stages of the policy-planning cycle, from prioritization of targets and indicators through to policy evaluation, decision-making and implementation (Allen, Metternicht, & Wiedmann, 2019). Interest in the SDGs is growing, as seen by the emergence of a range of data-driven assessments of progress, gaps and opportunities for achieving the SDGs (Allen, Reid, Thwaites, Glover, & Kestin, 2020). Despite this growing momentum, few national governments have completed their own evidence-based assessment of progress.

The Sustainable Development Goals (SDGs) provide opportunities as well as challenges for developing countries, as the cost of its implementation will be high though it can bring long-term benefits. Nations are different and have their peculiarities and different perspectives. It is important that each nation should translate each relevant SDG into National Plans of Action. This must be borne in mind when creating plans and policies for Africa. Four major challenges that need to be addressed for achieving the SDGs in Africa are financial, maintaining peace, measuring progress and accountability (Kumar, Kumar, & Vivekadhish, 2016).

According to UNESCO, more than 1.2 billion learners worldwide (68.5% of total enrolled learners) are out of school due to measures to stop the spread of COVID-19.30 288 million are African learners (24%) of which 15.6 million in tertiary education, 72.3 million in secondary, 177.7 million in primary and 22.4 million in pre-primary. The immediate impacts of this crisis on education include poor learning outcomes, delayed progression and graduations, and could potentially cause lifelong harm, by delaying the development of crucial social and emotional skills, and ultimately widen inequality (Khalid).

Sound metrics and data are critical for turning the Sustainable Development Goals into practical tools for problem-solving. By allowing stakeholders to evaluate the current state of affairs and identify key problem areas, they serve to mobilize actors across government, academia, civil society and business. Better yet, goals indicators can be used both as a management tool and report card to identify priorities for early action, guide the transformations needed to achieve the goals by 2030, track progress and increase accountability (Sachs, Kroll, Lafortune, Fuller, & Woelm, 2021).

FIVE PILLARS OF READING INSTRUCTION

Phonemic Awareness

Phonemic awareness is one of the main pillars of reading instruction utilized in order to build an effective reading program (NICHD, 2000). On one hand, it is defined as having the understanding that words are constituted of a set of different units of sound; On the other hand, it is demonstrated by having the skill and capabilities of hearing, detecting and producing these separate sounds of words by means of "dividing or segmenting words into their component sounds, blending separate sounds into words, and recognizing words that sound alike or different" (Point, 2004). Phonemic awareness is defined by reading experts as the ability to "focus on and manipulate phonemes in spoken words" (Point, 2004).

For instance, hearing and identifying that the word *dog* has three sounds, or phonemes /d/ /o/ /g/ is an example of phonemic awareness skill (Point, 2004). Therefore, it is highly dependent on alphabetic knowledge and recognition, as well as phonemes. Phonemes are the smallest segment units of sound that make up spoken words. They are usually blended and combined in different forms and sequences in order to constitute syllables and words (NICHD, 2000).

Phonemic awareness instruction typically depends on a systematic instruction approach (Point, 2004). In order to get optimal benefits from phonemic awareness on reading capabilities, instructors are encouraged to follow through the phonemic awareness tasks sequentially from least to most difficult. An example of such a systematic approach would be: (1) Isolating phonemes (2) Identifying and categorizing phonemes (3) Blending phonemes (4) Deleting phonemes (5) Segmenting words into phonemes (6) Adding phonemes (7) Substituting phonemes (Point, 2004; NICHD, 2000).

Phonemic awareness can help students in developing their reading skills through providing skills that would help them recognize and use unfamiliar words. Students can utilize their gained phonemic awareness by using phonemes in decoding and in new word learning (Point, 2004).

Phonics

Phonics is defined as "a set of rules that specify the relationship between letters in the spelling of words and the sounds of spoken language" (Point, 2004).

Several different instructional approaches have been utilized to teach phonics explicitly and systematically. Synthetic phonics, analytic phonics, embedded phonics, analogy phonics, onset-rime phonics, and phonics by spelling are examples of these techniques (NICHD, 2000).

Despite the fact that all explicit, systematic phonics techniques involve a planned, sequential introduction of a set of phonic elements, as well as teaching and practice of those elements, they differ in a number of important ways. The content provided varies from a simple collection of letter-sound correspondences to a complex set of phonics generalizations. Furthermore, the application techniques taught to students are different (Point, 2004; NICHD, 2000).

Synthetic phonics programs teach students how to break down letters into sounds, or phonemes, and then blend those sounds together to produce words. Analytic phonics avoids having students utter sounds one at a time in order to decipher words. They are instead trained to

investigate letter-sound relationships after the word is identified. Phonics- through-spelling programs teach students how to turn sounds into letters and consequently write the corresponding words. Phonics in context teaches students how to identify new words in text by using sound-letter correspondences and context clues and signals. Analogy phonics programs teach students to identify new words by using components of written words they already know (NICHD, 2000).

However, there are no strict and fast rules when it comes to systematic phonics approaches where some phonics programs integrate two or more of them. Despite variances, systematic phonics programs have one thing in common: they outline a planned, sequential set of phonic elements and teach these elements explicitly and systematically. All phonics programs aim to help students build a sufficient understanding and application of the alphabetic code so that they can advance in learning to read and interpreting written language (NICHD, 2000). However, it is vital to note that phonics instruction is *only one* of the several necessary pillars of reading required for an effective reading program and reading achievement (Point, 2004).

Fluency

Fluency is defined as " recognizing the words in a text rapidly and accurately *and* using phrasing and emphasis in a way that makes what is read sound like spoken language" (Point, 2004). Being fluent is illustrated by the extent of the speed, accuracy, and proper expression in word recognition while reading (Point, 2004; NICHD, 2000).

Research on the pillars of reading have shown a significant correlation between fluency and comprehension (Point, 2004; NICHD, 2000). In order to be able to comprehend and construct meaning of a written text, the skill of automatic word recognition and decoding should be mastered. From a cognitive perspective, the efforts of a person's cognitive resources should be reserved for the comprehension process of a written text, while the recognition of words and their meaning - demonstrated by fluency- should be an automatized process and not take up any of the cognitive resources required for comprehension (Point, 2004).

In order to progress in the proficiency of speedy automatic word recognition, specific instructional techniques and constant practice is required. Some of the most effective fluency progression techniques include, but are not limited to: (1) Repeated reading (2) Paired reading (3) Shared reading (4) Assisted reading (5) Radio reading (Point, 2004).

The common point between all these practices is the vitality of repetition in order to develop fluency in the most effective long-lasting way. Through repetition, a students' conscious effort to decode and recognize words exponentially shifts into an unconscious automatic process such that all cognitive resources can be utilized on comprehension (Point, 2004).

Vocabulary

According to Point (2004): "The term vocabulary refers to words we need to know to communicate with others. There are four types of vocabulary: listening, speaking, reading, and writing. Listening and speaking vocabularies are sometimes referred to collectively as oral vocabulary."

The role vocabulary plays in reading instruction is important for word recognition on one hand, and text comprehension on another hand (Point, 2004) . For one, beginner readers use the pronunciation and definitions of words from their oral vocabulary in order to decode, recognize and accurately pronounce printed text. Moreover, instructional practice for vocabulary progression has been shown to have a significant effect on comprehension. Research findings highlight the importance of long-term vocabulary instruction as well as teaching vocabulary words before assigning readings are two techniques that support the aforementioned statement (Point, 2004).

According to research conducted by NICHD (2000), a set of vocabulary instruction techniques can be used to facilitate an effective development of vocabulary. Firstly, direct and indirect instruction; Direct instruction is the explicit sharing of words' definitions, whereas indirect instruction is illustrated by introducing students to word-learning strategies that they can use to learn words' meaning independently. For example: using a dictionary, understanding word parts or root words, and through context clues. Furthermore, students can learn new words through the process of reading aloud while including a discussion and explanation of unfamiliar words throughout the session (Point, 2004).

Another means of vocabulary development is repeated exposure, a rich context, and the inclusion of different vocabulary tasks to learn new words. Demonstrations of the latter include incorporating sample sentences along with definitions when introducing new vocabulary. Furthermore, active engagement rather than being passive learners with vocabulary improves learning. For instance, students should use these new words in sentences, match words with their respective definitions, associate new words with familiar ones, use the new vocabulary in different contexts… (Point, 2004).

Since going through every single word in the dictionary is not possible, teachers should be selective in the vocabulary they decide to explicitly introduce throughout a learner's reading progression. Taught vocabulary words should be decided through identifying words the students are unfamiliar words, more important words, words they will encounter frequently and words they might not be able to learn independently (Point, 2004)

Alongside direct and formal instruction to introduce new vocabulary, increasing one's repertoire of words depends on the frequency of reading texts with new words, as well as the volume of words read. According to Point (2004): " Most children will encounter far more unfamiliar words in print than in conversational speech or on television." Therefore, reading is a crucial source of vocabulary growth.

Comprehension

"Comprehension involves constructing meaning that is reasonable and accurate by connecting what has been read to what the reader already knows and thinking about all of this information until it is understood. Comprehension is the final goal of reading instruction (Point, 2004)".

In order to assess people's levels of comprehension, one of the main ways is to monitor their usage of comprehension strategies, their awareness in making conscious decisions when using these strategies, and their attribution of their comprehension to effort rather than ability (Point,

2004). When and how they use comprehension strategies demonstrates self-regulated learning which is essential for successful comprehension.

Comprehension strategies allow a person to approach different texts in different styles of thinking and to go beyond the surface meaning of the text. One of the most important comprehension strategies is using one's prior knowledge (Point, 2004). Through forming connections between pre-existing notions and new knowledge in the current text, learners can make inferences to better understand the meaning of the text. An appropriate usage of this comprehension strategy strengthens the ability to recall factual information and to detect and question possible inconsistencies between the two sources of knowledge. This strategy can be developed through organizing small- group discussions and taking notes and making connections while reading (Point, 2004).

Another major comprehension strategy is based on generating questions while reading. This can help in self- monitoring one's comprehension, recalling information and making connections with prior knowledge, predicting aspects of the text and possibly identifying the writer's perspective or the text's main ideas (Point, 2004) . According to NICHD (2000), training through direct instruction as well as modeling is necessary in order for learners to successfully learn about and practice these strategies. An example for the strategy based on generating questions is utilizing question frames in order to facilitate the development of the independent usage of this comprehension strategy.

In addition to the aforementioned comprehension strategies, comprehension monitoring, cooperative learning and graphic and semantic organizers can be utilized by instructors to enhance learners' comprehension skills (Point, 2004; NICHD, 2000).

Orientations of Reading Instruction

Following the introduction to the five main pillars of reading instruction, the following sections will demonstrate the different orientations instructors can take. There are three main orientations of reading instructions that differ according to their emphasis which can be on (1) Phonics (2) Skills or the (3) Whole language (Barnes, 1998).

Phonics Orientation

Following a phonics orientation vitalizes placing emphasis on the identification of phonemes, letters, groups of letters, and patterns in spelling while reading (Barnes, 1998). This orientation follows the process of deriving the meaning of written text from print. Instructors who have this viewpoint would place emphasis on the first two pillars of reading instruction (Phonemic awareness and phonics). Through focusing greatly on the mastery of the process of recognizing, decoding and combining sounds and letters, learners would ultimately recognize and identify the meanings behind words and process sentences and paragraphs. This viewpoint believes in the importance of meaning and comprehension of texts, but does not place as much significance to them as is placed on the recognition, decoding and manipulation of sounds and letters in order to develop reading skills (Barnes, 1998).

Skills Orientation

A skills-orientation emphasizes the pillars of reading instruction relating to vocabulary and comprehension . However, the sequential preparation in this viewpoint exceeds these two pillars and follows the gain of the following skills respectively (1) Vocabulary (2) Decoding (3) Grammar (4) Comprehension (Barnes, 1998) . "Words" are considered the focal point in this orientation, where emphasis on decoding follows the recognition and understanding of a word. As is mentioned in the section on "Vocabulary" as a pillar of reading instruction, a skills-orientation also focuses on the four components of vocabulary (listening, speaking, reading and writing). In this orientation, instructors usually introduce new words to learners prior to reading a text so that they are familiar with the vocabulary and comprehension can consequently occur. Repetition is a predictor of success in developing reading skills, and the mastery of these skills and learning the new vocabulary is assessed through a number of follow up exercises (Barnes, 1998).

Whole Language Orientation

According to Barnes (1998): "The whole language model stands on "the premise that the whole is more than the sum of its parts" (cited in K. Goodman, 1989, p.208), thus maintaining the wholeness of the language is the objective of instruction." Reading in this orientation is viewed as a "natural extension of language" (Barnes, 1998). The relationship and interaction between the mind and the text is the main aspect of identifying meaning, rather than focusing on phonics or vocabulary. The comprehension of a text depends on making inferences from pre-existing knowledge on the context or topic of the written text. This resonates with the comprehension strategies mentioned earlier in the section of "Comprehension" as a pillar of reading instruction. Decoding and vocabulary acquisition through instruction are viewed as secondary to the development of reading. Advocates of a whole language orientation approach reading instruction from a student-centered approach where teachers act as facilitators or mediators in learning. Teachers should stimulate their learners' cognitive and critical thinking processes through encouraging creative and logical thinking in order to make sense of a written text (Barnes, 1998). This viewpoint relies on the interdependence of the systems of language as whole in order to achieve learner independence in their reading development process.

## MASS LITERACY CAMPAIGNS: LESSONS LEARNED FROM SETBACKS

During the implementation of literacy programs between 1952 and 2020, Mass Literacy Campaigns faced many challenges. By reviewing more than 240 literacy campaigns, we noticed that there are at least 45 challenges that campaigns faced (Figure 1). We divided selected challenges into eight categories: country, community, logistics, instructors, learners, curriculum, technology, and feedback. Although many of these challenges are specific to an individual campaign, some challenges are recurring across many programs. In this chapter, challenges will be divided into specific categories as depicted in Figure 1. Further, we will talk more about these challenges by giving relevant examples. Lastly, we will discuss experiences that are most relevant for the general review of literacy campaign setbacks.

The revision of mass literacy campaigns's challenges highlighted the importance of government involvement and support. Although most of the campaigns do receive some support from

national or local governments, many of them do not receive sufficient support and some receive no support at all. Most of the programs that do not receive *government support* struggle with sustainability and are forced to shut down the program even though it is still needed in the country. One study in Vanuatu argues that there is *a need for policy constraints*, for the program to be linked to a "clear national literacy program". (Hanemann, 2016)

Natural disasters, security issues, and electricity issues are some of the challenges found while investigating literacy campaigns that are not common but still occurring in some countries. For instance, one initiative in Bangladesh faced great expenses and problems due to a series of natural disasters that destroyed literacy infrastructure (Hanemann, 2016a). In some countries, security issues can be a setback for sufficiently delivering the literacy program. The dangerous situation in a country or region can lead to frequent attacks and robberies. In some countries, there is an unstable supply of electricity. For instance, a program in Liberia argued that more than 70% of the country does not have electricity due to the civil crisis (Hanemann, 2015a). Given that after daylight it is not possible to give lectures without electricity, the instructional time suffers. For some communities that are using mobile phones for the instruction of literacy, electricity is an even greater challenge because people cannot charge their phones.

Figure 1: *Challenges per category*
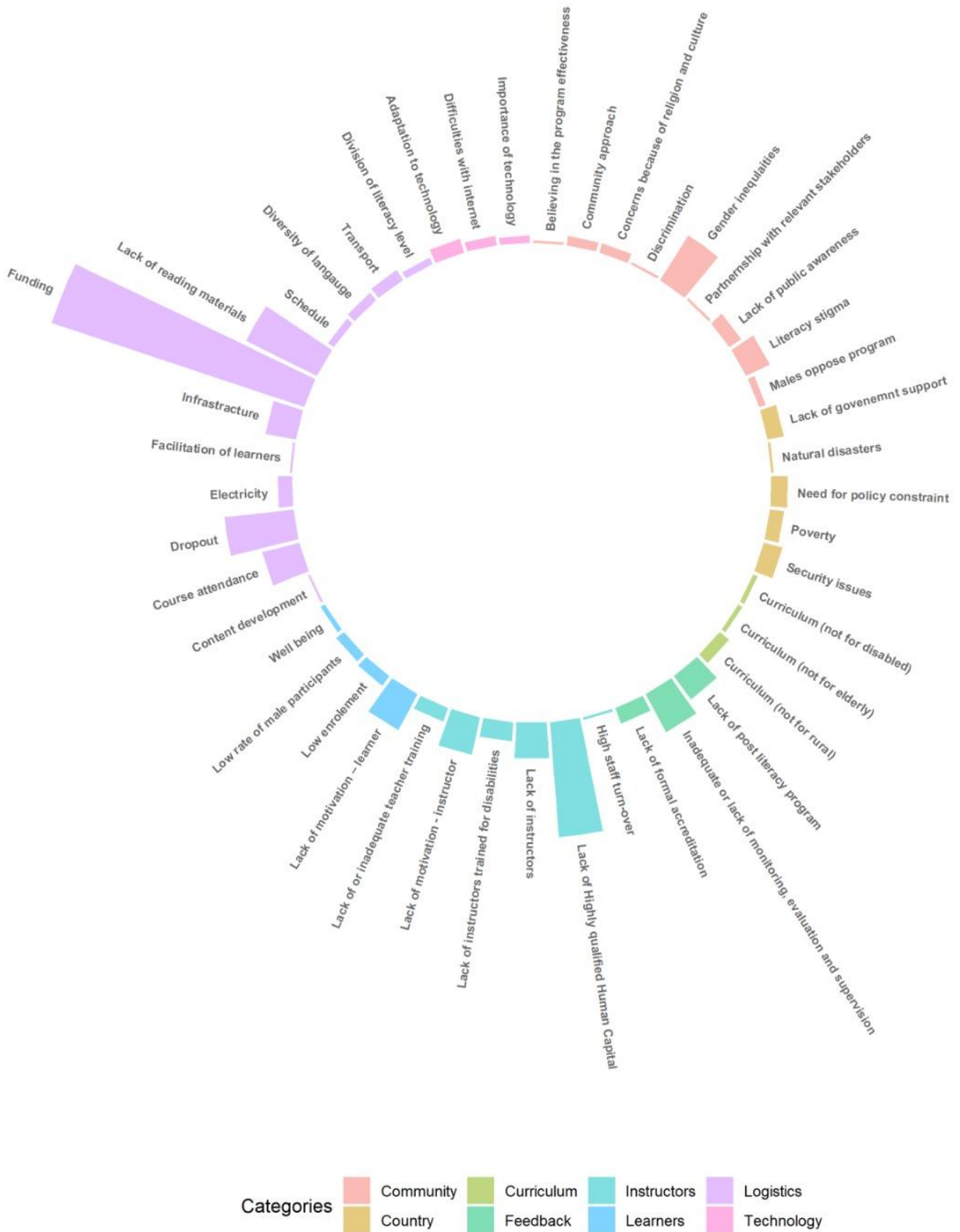
The last setback that is categorized as' 'country'' is poverty. Some programs are focused on communities with high poverty rates. Poverty is one of the biggest challenges for these campaigns because poor people cannot afford to attend classes due to family responsibilities. Instead of spending time on learning, they need to supplement family incomes. Many logistics issues such as course attendance, low enrolment, and dropout were all related to poverty issues. Not only logistic issues but also issues related to the learner's personal motivation and well-being are affected by poverty.

Some initiatives indicated that they lacked community involvement. One program in India recognized reaching the community as the main challenge they experienced (Hanemann, 2013). In particular, it was difficult to reach decision-makers and to communicate community needs to them. One initiative from France indicated that one of the challenges was to have partnerships with relevant stakeholders (Hanemann, 2016b). A further setback with communities is that there is a lack of awareness about the importance of literacy. Many programs are trying to focus on raising awareness to attract government and community attention and collect some funding. Public awareness is a challenge that affects inadequate government support. This is because it is important to ensure public awareness not only on the local level but also on the community and government level.

Further setbacks programs face around the world related to the community are concerns regarding religion and/or culture and belief in the program's effectiveness. People in some countries were concerned that the literacy program would undermine their religion and culture. As a result, they were reluctant to enroll in the program. Many campaigns indicated that it was difficult to convince the community about the positive impact of the program. Especially males were prone to oppose the programs, possibly because the programs empowered women.

The main goals of some campaigns were to tackle discrimination and gender inequalities. Many women across the world are discriminated against and as a result, have constrained access to education. Literacy initiatives are a powerful way to empower women and educate them. However, it is still difficult to reach women and enroll them into literacy programs. A traditional woman is frequently seen as a housewife and a mother. Thus, it is not unknown that women are often left behind in society, prevented from attending education and work. Literacy campaigns are facing similar problems, where women are restricted from attending literacy classes because of culture, religion, or simply because of lack of time due to home responsibilities.

For any non-profit organization, funding is a key determinant of program success. As it can be noticed in Figure 1, funding is the most common challenge that literacy campaigns face. Almost half of the campaigns specifically indicated the lack of finances as an obstacle to the efficiency of the program. For instance, stable funding sources are necessary to ensure long-term sustainability. Although we put funding in the logistics category, this challenge is closely related to the government support and partnerships with relevant stakeholders, which are categorized as country and community. Each campaign depends on the donations from these partnerships and from the government itself. Lack of funding is a setback that leads to the numerous challenges that are further faced during the program.

As depicted in Figure 1, one of the most frequently mentioned setbacks is a lack of qualified human capital, but lack of any instructors in general is also common. While for some campaigns it is a challenge to attract highly professional instructors, for others it is a challenge to recruit a sufficient number of even qualified volunteers. A lack of finances to pay off instructors makes it difficult to attract or retain them. Because of this, many campaigns are faced with a high turnover of instructors. For instance, the initiative in Chile found in a six-year study that 75% of the teachers participated for only one year, and 91% for one or two years (Hanemann, 2014). This is a great problem because the high turnover of instructors requires constant training of new instructors. Lack of teaching experience is another frequent setback, which is not possible to overcome without proper teacher training. Unfortunately, due to the lack of funding once again, many programs fail to provide sufficient teachers' training or any training at all.

Campaigns' successes are dependent on the capability and availability of instructors. Given that many campaigns do not have sufficient funding, instructors are mostly volunteers. This means that without self-motivated individuals that are willing to work without salaries, there is no program. Therefore, a lot of initiatives find it difficult to motivate and hence keep their instructors. Without funding to motivate them through financial rewards, these initiatives have to find other solutions to keep their instructors. As mentioned before, it is a frequent challenge to recruit any instructors at all, let alone for programs that require instructors with specific skills. For instance, some initiatives struggle to find staff that are specialized to teach people with disabilities. It is difficult to recruit staff that already have this knowledge, and are capable of supporting learners with special needs.

Some logistics challenges were detected that are also closely related to the lack of funding. Namely, initiatives often struggle with a lack of reading materials and infrastructure. There are some examples of setbacks that programs faced regarding the provision of instructional materials. For instance, one initiative in Argentina that used radio broadcasting as a platform to deliver learning material struggled to diversify content (Hanemann, 2017b). On the other hand, initiatives that were using paper materials and books experienced a persistent shortage of reading materials. It was challenging to develop content that is appropriate for a certain community - for children, the elderly, people with disabilities, people from rural areas, etc. Some programs were often struggling with the lack of or poor physical space and hence were unable to provide lessons to all interested students. Others could not deal with the transportation of learners who were forced to commute long distances to attend classes.

Some initiatives mentioned that they struggled with the facilitation of learners and the schedule of the program. In particular, one initiative based in Uruguay mentioned that their main challenge was to facilitate all learners who needed a literacy program (Hanemann, 2011). Usually, it is challenging to reach the most vulnerable and isolated learners such as learners living in poverty or with family and work difficulties. Some initiatives argued that one of the main challenges they faced was to identify teaching hours that would suit all learners. Scheduling classes was very challenging because these programs were mainly for school children. Specifically, classes had to be scheduled either too early in the morning (before school), or late in the evening (after school).

Other challenges related to logistics faced by individual initiatives were diversity of language and division of literacy level. One program in Canada stated that one of the main setbacks they faced was for instructors to decide in which language the instruction will happen, given that participants spoke a diversity of languages (Hanemann, Ed.i). The most challenging part was to develop learning materials in multiple languages. One program in the Dominican Republic explained in their report how challenging the division of literacy levels was for them (Hanemann, 2015b). In particular, there were significant differences between students' literacy levels, and instructors often struggled to properly divide students into groups.

Many studies faced problems with dropout and course attendance. The main reason why women were dropping out of the program is that they had too many responsibilities at home and had little time to attend classes. Males, on the other hand, were found to drop out because they felt uncomfortable with the majority of women being participants. Few programs indicated that people drop out because they migrate to another part of the country. For instance, one initiative in India stated that people were migrating seasonally in search of better living conditions (Hanemann, 2013). Other reasons for dropout and low course attendance were cultural and traditional reasons, health issues, and personal motivation.

Many of the challenges that are categorized as 'learners' are closely related to course attendance and dropout. For instance, learners' lack of motivation is a challenge that is commonly mentioned by initiatives as one of the causes of dropout and low course attendance. In particular, 17 studies argued that learners' lack of motivation is one of the main challenges they faced. Some of the reasons why learners are not motivated are lack of interest in learning, low self-confidence, and the inability of teachers to sustain learners' motivation. Another challenge regarding learners is their poor well-being. One initiative in Sweden indicated that many participants of the program are experiencing psychological consequences such as insomnia, anxiety, and trauma (Hanemann, 2014a).

Although for some initiatives low enrolment is a challenge, for other initiatives the more specific challenge is the enrolment of male participants. In many countries that face illiteracy males have higher rates of literacy, but it is still a great challenge for initiatives to reach male learners. This is because of literacy stigma and shame, which is a stronger barrier for male participation than for females. Not only are male adults reluctant to enroll into a program due to the shame of not knowing how to write or read, but also they are subject to stigmas associated with being too old for education.

A further challenge for programs is to develop a curriculum that is flexible and inclusive of all learners. The standard curriculum is developed for the average learner, thus not appropriate for people with disabilities, the elderly, and people from rural areas. For instance, an initiative in Peru indicated that the learning materials used for their literacy program were developed in urban areas and were unable to meet the needs of rural learners (Hanemann, 2016c). One program in Nepal faced a challenge with the curriculum not being appropriate for the elderly (Ayyappan, Ed). This program learned that people older than 60 years have specific cognitive challenges. In sum, not only learning material but also teaching methodologies should be adaptable to different learners' competencies.

Some of the investigated initiatives were using technology to teach literacy. Although e-learning is an effective teaching method, many initiatives faced several challenges. The biggest challenge was the adaptation to technology. Many areas that need literacy are rural and poor. This means that it is difficult for those communities to keep up to date with technological development. Also, smartphones or tablets are not widely used everywhere. One program in the United States of America that used mobile phones stated that the main issue was to develop a platform that would be compatible with all mobile phones (Zholdoshalieva, 2018). Another common issue was difficulties with the internet connection. A program in Senegal indicated that it was particularly difficult to integrate internet connection in rural and remote areas (Hanemann, 2017c). On the other hand, the program in Brazil had an issue convincing instructors about the importance of using technology in learning (Hanemann, 2016d).

The final category, 'feedback,' includes challenges that are happening after the literacy program is finished. For instance, 12 studies mention that the lack of a post-literacy program was one of the important setbacks they faced. Post-literacy programs usually did not exist due to the lack of funding. One initiative in Palestine suggested that it would be useful to have an advanced literacy program, where students who are interested can increase their literacy knowledge to a higher level.

Inadequate or lack of monitoring, evaluation, and supervision is one of the common challenges among UNESCO case studies. In particular, 18 studies mentioned some issues with monitoring, evaluation, and supervision. Some studies mentioned that sufficient monitoring and supervision were important to ensure the program's effectiveness. Receiving poor feedback from monitoring can adversely affect the quality of instruction and the overall program. As indicated by one initiative in Bhutan, one of the reasons for inadequate monitoring, evaluation, and supervision is that some literacy centers are located in areas that are difficult to reach by road (Hanemann, 2015c). Some initiatives mentioned that they were lacking an external individual evaluation of the program, which would be very useful to conduct.

Finally, lack of formal accreditation is mentioned as an issue experienced by seven programs. They argue that not having accredited certificates negatively affects participants' motivation, especially for young people. Some initiatives focused on learners from prison indicated that participants were discouraged to engage in literacy programs because of a lack of certification. Additionally, the lack of formal accreditation undermines the quality and seriousness of the program and aggravates the promotion of the program.

As it can be noticed from the text, it is difficult to categorize challenges into a single category as they are all closely related to each other. The beginning for the majority of issues is experienced as a direct effect of the lack of funding. Non-profit organizations such as those that organized literacy programs usually depend on government support. Because of this, the first and most important challenge is how to involve and convince the government about the importance of eradicating illiteracy.

MASS LITERACY CAMPAIGNS: LESSONS LEARNED FROM SUCCESSES

After looking into challenges that were faced by Mass Literacy Campaigns, it is useful to review

Categories

- Community
- Curriculum
- Feedback
- Logistics
- Pedagogy
- Strategy
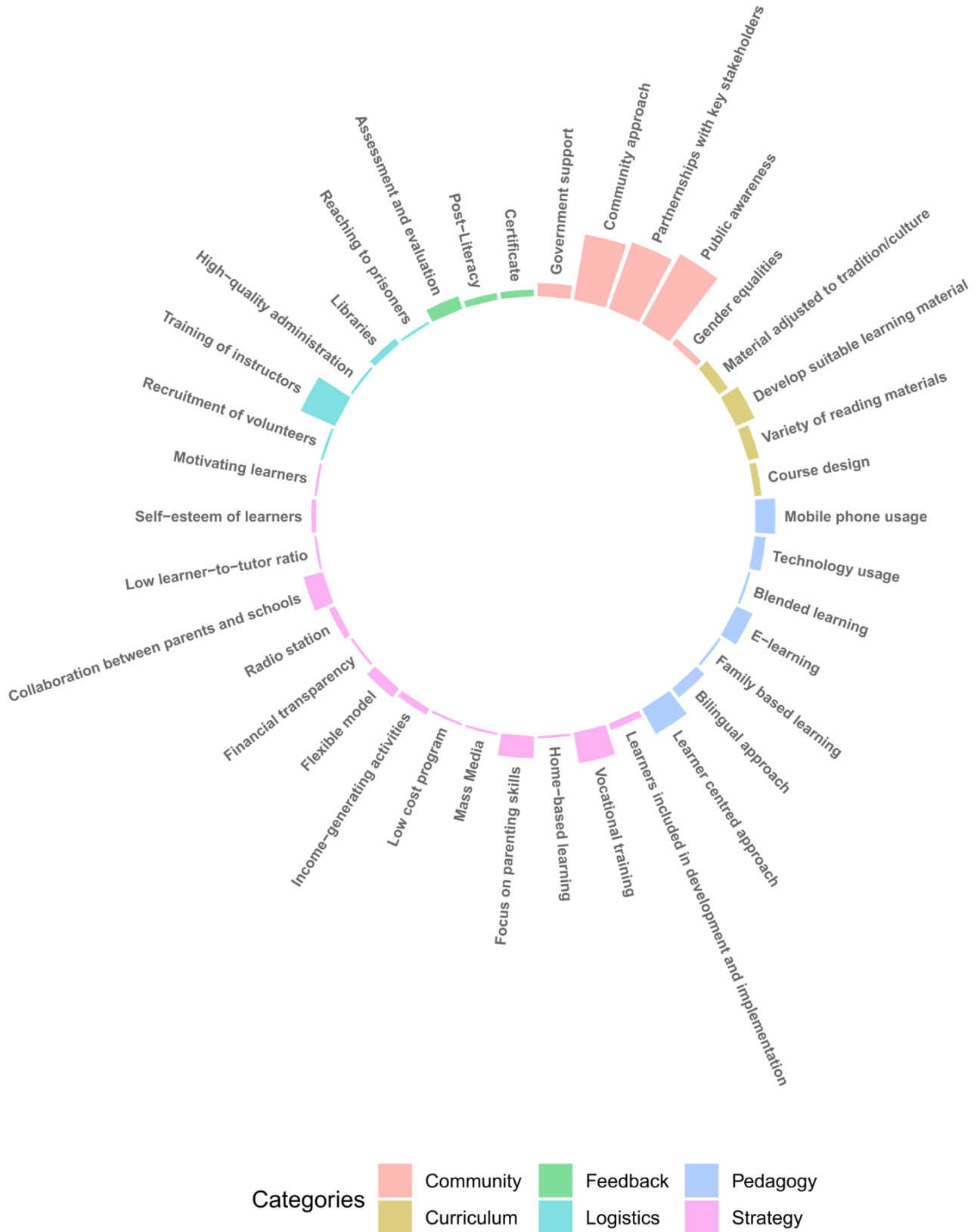
As suggested in the chapter about the challenges, many programs' successes depend on the government's involvement. While many programs mentioned government support as one of the main challenges, only six programs mentioned government support as their success. Receiving government support was crucial for the sustainability of these programs. One study in Nigar indicated that the government ensured partnership with important stakeholders such as UNESCO and UNICEF (Hanemann, 2016e). One of the tactics to have continued government support was to show them the achievements of the pilot study and the significance of the program.

A large number of initiatives argued about the importance of the community approach. In particular, these programs indicate that initiatives must involve the entire community and ensure their close participation in the program. This is not only important to empower the community but also to ensure the sustainability of the program. One initiative in Mozambique noted that establishing community forums was one of their important successes (Hanemann, 2015d). The purpose of these forums was to include learners and the entire community and enable them all to participate in the implementation of the program. Forums were shown to be useful for both mobilizations of the learners and for the process of solving problems that the program faced.

Another important approach in the 'community' category is partnerships with key stakeholders, which is mentioned as a success by 32 initiatives. Given that government support is a very frequent challenge mass campaigns are facing, partnerships with stakeholders are one of the successful alternatives. These initiatives strived to include all important stakeholders who could be relevant to the particular community. For instance, partnerships with UNESCO, UNICEF, local NGOs, academics, publishers, and authorities of a community were crucial for the success of many initiatives. Some partnerships were key for securing the necessary funding, whereas others contributed by providing equipment, tools, learning materials, knowledge, and their personal engagement. One initiative in Canada argued that it is important not only to include stakeholders whose scope of work is literacy but to expand it to other fields such as the economy (Hanemann, 2012).

As depicted in Figure 2, most logistical successes that were detected are faced by only a few individual programs. For instance, one program in Jamaica organized an "aggressive recruitment campaign" to reach as many volunteers as possible and ensure their recruitment due to their crucial role for the programs' efficiency. Another individual success mentioned by the initiative in Chile was reaching out to the prisoners who were unable to participate in any other form of education. One program in Georgia mentioned their high-quality administration that efficiently manages the entire project as their most important success (Hanemann, 2012a). Other initiatives provided literacy educational opportunities through libraries. For instance, an initiative from Germany established a prison library to encourage prisoners' reading (Hanemann, 2012b). The program from Afghanistan found that libraries had a positive effect on students and teachers but that it also had a social impact (Dolma, 2019). Libraries contributed to the improvement of learners' reading skills and to the professional development of teachers. The last and most common logistical success mentioned by the 17 initiatives was their training of instructors. Not

only that appropriate training of instructors increases their skills and hence ensures the quality of the program, but it also ensures sustainability.

As previously mentioned, some of the strategies to ensure the success of the program were using mass media and radio stations. Although mass media was mainly used by some programs for mobilization of learners and raising public awareness, other programs indicated that mass media was crucial for policy change that was needed in that country. Similarly, some initiatives used radio stations to raise public awareness. On the other hand, some initiatives used the radio station to broadcast literacy lessons. Learners were not only able to follow the lessons but also to ask questions by using their phones. Broadcasting literacy lessons was particularly useful to reach isolated learners.

Family learning is one of the strategies used by some initiatives to enhance the programs' outcomes. In particular, these programs focused on parenting skills or the collaboration between parents and school. Some of these initiatives argue that parental involvement is crucial for children's successful learning. To motivate parents to increase their involvement, some initiatives strived to include parents in the development and implementation process. Also, trust between parents and instructors was critical for success. One initiative in Pakistan indicated that girls were often prevented from attending classes by their parents and that one of the solutions to this problem was involving parents (Hanemann, 2016f). Another advantage of home-based learning was that learners were able to receive feedback from their family members.

The following strategies related to learners were used by individual initiatives to ensure the effectiveness of the program: income-generating activities, motivating learners, increasing the self-esteem of learners, and including learners in development and implementation. Some of these successes are correlated with each other. For instance, helping learners to increase their self-esteem would further motivate the learner to continue with the literacy program. Some programs found that learners can be empowered by involving them in income-generating activities such as agriculture, shops, and gardening. Learners, especially women who were involved in income-generating activities were not only more motivated to continue participating in the program, but also improved their living conditions. Another program in Colombia established an entrepreneurship course as a strategy to decrease participants' dropouts and ensure they complete the literacy program (Hanemann, 2016g). When learners were included in the development and implementation process, initiatives were able to properly focus on their needs.

Other successes that were noted by initiatives were the low-cost program, financial transparency, flexible model, low learner-to-tutor ratio, and vocational training. The strategy of one program in Ghana was to have a low-cost program that is easy to implement and does not require a lot of support for development. One program in Indonesia used financial transparency as a strategy to gain trust and motivate key stakeholders to participate and invest. Some initiatives used a flexible model to attract participants to a program. For instance, the program in Myanmar offered online lessons that were flexible and easily accessible, hence more learners successfully completed the program (Hanemann, 2021a). The program in Malta was designed to offer a low learner-to-tutor ratio to maximize the commitment of instructors to individual learners (Hanemann, 2010). At least 14 initiatives indicated that they used vocational training as a strategy for success. Moreover,

implementing vocational competencies as a part of the literacy program increased learners' enrolment, motivation, and completion of the program.

The category 'pedagogy' was created to include all different pedagogies that were used by initiatives. Many pedagogical strategies were related to technology usage. Concerns over using technology as a learning tool were mentioned in the previous chapter as one of the challenges some initiatives faced during implementation. This challenge was overcome by some initiatives by working closely with relevant stakeholders. It was important not only to convince learners and their families about the importance and effectiveness of technology but also instructors. Initiative in Colombia arranged professional development for instructors to ensure the importance of technology is acknowledged by them (Chatzigianni, 2019). Mobile phone usage in many ways empowered the community. Not only that using mobile phones for learning increased access to information, but it also helped learners to communicate with each other and teachers. One of the main successes an initiative in Lebanon mentioned was properly linking pedagogy with technology (Hanemann, 2016g). In particular, they argued that technology cannot replace pedagogy and that they should rather be linked by educational professionals.

The learner-centered approach, bilingual approach, blended learning, and e-learning are different approaches to learning used by different initiatives. At least 13 initiatives argue that for a literacy program to be efficient and for learners to stay motivated, a learner-centered approach is needed. The role of the instructor is to direct the course according to learners' needs. For some programs, a bilingual approach to education was found to be more effective than the traditional one. This is not only because of bilingual education advantages regarding language acquisition and improvement of skills but also because of the lower costs of the program. Although many initiatives choose to provide education through e-learning, only eight of these initiatives talked about distance learning as their success. One of the biggest advantages of distance learning is the possibility to attract more learners due to its flexibility in time and place. Not only fully distant learning is mentioned to be very effective, but also blended learning. One program in Ireland mentioned that the application of blended learning resulted in meeting individual learners' needs (Hanemann, 2014b).

Some initiatives discussed their successes regarding curriculum. For instance, one program in Angola designed the course to be context-based and for lessons to meet learners' needs (Hanemann, 2012c). Another program based in Austria argued that courses should be designed in a variety of ways (Hanemann, 2016i). Some initiatives talked about the importance of adjusting the curriculum to the tradition and culture of the country. Although for many initiatives it was a challenge to provide and develop suitable learning material that will be adjusted to the individual learners' needs, five initiatives mention it as their success. This is especially important in countries with a problem of gender inequalities and of girls and women being prevented from attending education. It is common for female learners to be discouraged to start or continue with literacy classes due to the culturally controversial material. Once the material is adjusted, it is much easier to attract female learners and ensure their successful completion of the program. Some initiatives mentioned that providing various reading materials was one of their successes.

The last category that emerged while examining the successes of literacy mass campaigns is 'feedback'. Namely, some initiatives were particularly successful with certificates and follow-up programs. For instance, some initiatives provided certificates at the end of the program, to award learners. Although certification is found to have a positive effect on learners, not many initiatives managed to provide accredited certification. An initiative in Ecuador indicated that one of their main successes was to provide certificates accredited by the Ministry of Education (Hanemann, 2016j). As previously mentioned in the chapter about challenges, many programs do not offer post-literacy programs due to insufficient funding. However, some programs ensured follow-up of learners after completion of the program. Namely, learners were provided with the learning materials and encouraged to continue with home-based and family-based studying. They argue that this was crucial for the success of the programs.

The last successes that are important to mention, as noted by the six initiatives are assessment and evaluation. An initiative based in Slovenia indicated that their important success was an innovative model of assessment (Hanemann, 2016k). Namely, learning plans were made for all individual students, and formative assessment checked whether the desired outcomes were achieved. One program in Norway explained that the database was generated during the program, containing all the information about learners (Hanemann, 2013a). The main purpose of this database was to provide an optimal and successful evaluation of the program. Another program in Brazil conducted qualitative field research at the end of the program each year, to ensure professional evaluation (Hanemann, 2013b).

To conclude the chapter about successes, it is important to reflect also on the chapter about setbacks. When compared with challenges, it can be noticed that more individual successes are noted, and only a handful of them are repeated by many initiatives. Although a large number of successes can suggest more ideas for future initiatives on how to successfully plan the implementation of the program, it also may mean that there is no certain strategy that can work for all programs. Every country and every community is individual and its inhabitants have individual needs. Because of this, it is useful to review all successes mentioned by Mass Literacy Campaigns and determine which of them can be used for a particular program.

GLOBAL DREAM APPROACH

A report by UNESCO (2019) determines that early childhood education in the world is expanding, but makes note of Southern Asia having the slowest growth since 2000. The report also shows that the percentage of trained teachers in primary education in Southern Asia is also slowly declining.

However, India by itself seems to be improving access to quality education, and thus reducing the number of out-of-school children by more than a half from 2006 to 2014, at around 6.1 million or less than 3% (SRI and EdCIL (India) Limited, 2014).

UNICEF (n.d.) claims that India's laws, policies, and programmes have contributed to this outcome. Still, half of school-going children do not achieve grade appropriate learning levels, and children's school readiness is also below expected levels.

The Annual Status of Education Report (ASER Centre, 2017) shows that half of Grade 5 students in India cannot read Hindi text at a Grade 2 level. This is a serious problem that demonstrates the reality of deep issues in the Indian education system. Global Dream (GD), an Indian-based NGO that deals with issues of literacy, identifies the core of these issues to be the large sizes of classes, rote learning based "chalk and talk" pedagogy, and reliance on physical discipline.

In 2016, India was estimated to have an adult literacy rate between 60-69%, while the youth literacy rate was estimated to be around 80-89%. This means that India's overall literacy rate has grown when compared to previous decades. Moreover, the entire Southern Asia region has seen the largest progress in literacy in the world. In particular, the youth of this region is twice as likely to be literate than their counterparts were fifty years ago (UNESCO, 2017).

Nonetheless, Global Dream has identified illiteracy as a persisting issue in India, particularly when it comes to literacy as an expanded concept. Global Dream asserts that this new concept of literacy must not only include the development of intellectual ability through knowledge of reading, writing, and arithmetic, it must also provide a new perspective that is based on the four building blocks of education – universal values, global understanding, excellence in all things, and service to humanity (Global Dream, n.d.).

Through the "Sumpoorn Nai Shiksha (SNS)/All-encompassing New Education" programme, Global Dream posits that "instead of addressing the mind alone, the foundation of education in the 21st century must be built upon the four factors that make a complete human being – the heart, the spirit, the mind and the body" (Global Dream, n.d.) In other words, the individual should be at the center of all action.

Global Dream's model discards the uniformity and rigidity of traditional education, and frames values, attitudes, knowledge, and skills as a foundation for education. This programme is meant to be flexible and adaptable, that can be improved through feedback, and easily adjusted according to individual group needs without compromising on the basic building blocks noted. It has been designed as a seven-point empowerment programme for the underprivileged and the illiterate populations of India, with special emphasis on education of the girl-child (Global Dream, n.d.).

This seven-point educational framework for SNS essentially consists primarily of the four building blocks primarily, and then reading, writing, and arithmetic (The three Rs). Thus, it maintains the importance of the habits of the heart and attitudes towards life and learning, over that of the abilities of the mind, as education in the past has emphasized (Global Dream, n.d.).

Devised as a way of teaching that seeks to model a better, learner-centered education, the programme is more than just a set of books. The principles of Global Dream's pedagogy can be summarized as "sawal, samay, and sambandh":

- Ask the learner questions (sawal), because this will be more interesting & engaging for them.

- Give them plenty of time (samay), so that they can think for themselves and go at their own pace.

- Keep a friendly relationship with them (sambandh).

The emphasis is on moving from the known to the unknown, which enables learners to incorporate this new knowledge effectively (Global Dream, n.d.).

This innovative approach to teaching FLN is meant to increase the speed of learning. It is based on enquiry; the learner is asked questions and isn't helped unless deemed necessary by the instructor. Learners build off their previous knowledge. They are presented with pictures that represent certain words (most likely objects that are recognisable and easy to pronounce), which they quickly learn to decode. An example in English would be a picture of a car, which the learner would be asked to decode ("What is this?"). Then, the learner is asked what the first sound of the word "car" is (/k/). After going through this process with other pictures, "apple /æ/" and "tub /t/" in our example, the learner combines these three first sounds into a new word: "cat /kæt/". In this way the learner is taught to think of letters as symbols of sounds, and connect the pictures to the letters. After practicing to make new words with the letters they have learned, they can move on to new letters.

The books contain detailed information about the pedagogical approach, and give instructions on how to conduct a lesson. The first book consists of five lessons that only introduce a few letters at a time. Each lesson contains a multitude of words at the bottom of the page, used by the learner to practice. When finishing the fifth lesson, the learner should be able to read some short passages and poems found at the end of the first book. The second book is concerned with more challenging reading (e.g., "ll", "oo", "sh", "ch", etc.).

The same approach is applied to numeracy. The instructor asks questions, and refrains from answering them. There is, however, use of physical objects in order to help the learner gain a deeper understanding. Global Dream relies mostly on the use of matchsticks to represent the number 1, and ice-cream sticks to represent the number 50. Teaching numeracy should be fun, and thus there are numerous activities and games presented in Global Dream's toolkit meant to teach a multitude of mathematical concepts.

GLOBAL DREAM STRATEGIC PLAN and REACH

As a relatively small NGO, Global Dream primarily works through collaborating with other organizations, and providing training and materials to enhance the existing efforts (Global dream n.d.). This approach incorporates support to local brains (Mednick n.d.) and their connections with global efforts. Global Dream works to leave no one behind, and for that, their efforts are concentrated to reach the gap existing in 2020, of 14 percent of people who can not understand or write a simple sentence (United Nation, 2020). The goal is to tackle illiteracy in relation to what Sustainable Development Goals show us, "that all young people and a large part of adults achieve literacy" (UNESCO, 2020). Global Dream advocates for possible ways for each person to teach another. For this and as we have mentioned before they seek to activate and generate links with local institutions, so that they are the ones that solve in a concrete way the difficulties related to literacy.

This process starts with political will from the states, which allow unifying mechanisms, explicitly supporting the global literacy campaign, allowing and facilitating the application of the toolkit

developed for both literacy and arithmetic. Global dream identifies that without the political will, the efforts run the risk of not achieving their objectives, given not only the scale of the task, e.g. in Brazil with population in 2020 of 212 millions, with a literacy rate of 93% in adult over 15 (UNICEF, 2018-2021), who are represented by the 80% of the population (word bank), this mean that 12 million of people in Brazil are not able to read. But also the necessary modification, at least partial, of the study plans in order to incorporate these learning acceleration mechanisms, named as Accelerating Learning for All (ALFA).

This global-scale effort involves sharing a method of active listening by installing a question, which allows children and adults to overcome the limitations that not reading has generated in their understanding of the world around them, from this question they go from their knowledge to the unknown, using the toolkit, incorporated in the education process, supported by local authorities in connection with local NGO who believe in the methods of Global Dream previous mentioned.

In parallel to this process, Global Dream has developed a space for voices and organizations, the name is D-Talks, which means disruptive talks, those that through a regular meeting with NGOs and people seek to present new ways of solving old problems, installing relevant issues for the different organizations and presenting to the community, how these methods achieve results. With these D-Talks it is possible to give visibility to others who fight for the foundational literacy movement and at the same time generate networks that allow the dissemination of the goals of global dream worldwide. D-Talks focus on these four ACTS: Awareness, Commitments, Targets, Sharing. 159 encounters over the last 8 months, talking about technology, adult education, rural context, leadership, social organizations, teaching methods, inequalities, girl education, etc. Despite all the topics covered and the diversity of views, views tend not to exceed 50, for each video. Which limits the diversification and knowledge regarding the new ways of solving old problems. For this reason, one of the objectives is limited in its reach, while the network seems to be getting stronger, given the repetition of some exponents, who also delve into the explanation of their methodologies.

Despite the emphasis on political will as the engine of change, the current circumstances have changed the approach, reinforcing the need for the integration of non-governmental organizations. While initially the focus was on the 773 million people who cannot read or write, the gap that covid has opened, repositions the urgency around learning poverty, which prior to the pandemic was located around 53 percent of children in low- and middle-income countries and that today, according to World Bank estimates, could be between 63 and 70 percent.

In this way, not only foundational literacy will be understood as urgent, but also learning poverty, which is made up of two elements: learning to read and the active participation of students in the school process ((UNESCO, n.d.-a)

Given the effects of covid limiting the effective coverage of the states around Literacy, it is observed that the effective participation of the NGOs can allow the tools that global dream has developed to be directly approached, what is being deployed from the mass conversion of the toolkits and their availability to all who wish to use them.

Finally, it can be pointed out that the focus today is on ensuring that the setbacks caused by covid don't continue to increase and that learning has concrete effects on the compression of the world that surrounds children, for which both the methodology that Global Dream applies, with child-centered learning, such as the central incorporation of NGOs, like with the D-Talks

RESEARCH on EFFECTIVE ASSESSMENT

" In education, the term assessment refers to the wide variety of methods or tools that educators use to evaluate, measure, and document the academic readiness, learning progress, skill acquisition, or educational needs of students" (Assessment definition, 2015).

Assessment takes on different forms and can be carried out pre-instruction in the form of diagnostic assessment, during instruction in the form of formative assessment, and post-instruction in the form of summative assessment (Santrock, 2017 ; Assessment definition, 2015). These assessments are the three main types of assessments and each of them play a different role in the learners' and instructors' educational journey.

Diagnostic assessment is typically used as a means to discover the learners' pre-existing knowledge and skills in a particular subject, which can also be nonexistent especially when approaching learners in programs pertaining to basic literacy and numeracy. This type of assessment can help identify the level of knowledge of learners, their strengths and weaknesses, academic readiness, and the learners' needs so that instructors can plan their lessons and set learning goals accordingly (Santrock, 2017 ; Assessment definition, 2015; Literacy assessment practices, n.d). Moreover, applying pre-assessments can help set a baseline which can be later utilized in the evaluation process of a certain program (Literacy assessment practices, n.d).

Formative assessment is commonly referred to as assessment for learning as opposed to assessment of learning (Santrock, 2017). It plays a vital role in monitoring the learning progress of learners during the sessions throughout the program (Santrock, 2017 ; Assessment definition, 2015). Applying formative assessment allows educators to identify the domains in which learners are excelling on one hand, or are struggling in on the other hand. This would permit them to either carry on with the same methods during their learning sessions, or to adjust some practices in order to get back on track with meeting the learning goals and assisting the learners' progress (Literacy assessment practices, n.d).

Summative assessment addresses the learners' acquisition or mastery of the targeted knowledge and skills of an educational program (Santrock, 2017 ; Assessment definition, 2015). It documents the students' performance by the end of the instructional period, and its results can be used to evaluate the overall success of the program (Santrock, 2017 ; Assessment definition, 2015).

After reviewing a substantial number of literacy campaigns carried out in different regions and countries, different types of assessments in literacy can be identified. Generally, these literacy campaigns differed in their learning outcomes which consequently led to a variety of assessment methods. While some of these campaigns' main learning outcomes primarily focused on obtaining basic literacy and numeracy skills, a wide range of these campaigns stated these objectives as means to an end, rather than an end itself. For example,a number of these literacy

campaigns placed significant emphasis on the acquisition of more socially-based skills or work focused competencies. This will be further elaborated on in the following sections.

Key factors

An ongoing pattern of pre-assessments can be identified in most of these literacy campaigns, regardless of their learning outcomes. It is a very common assessment and evaluation strategy in many of these campaigns to conduct pre-tests and post-tests. Alongside the benefits mentioned previously regarding diagnostic and summative assessments on addressing learners' needs and skill acquisition, this was used tremendously as a means of overall program evaluation. A report by the Agora Center (2017) demonstrates the importance of the utilization of these different modes of assessments in literacy campaigns. They measure the students' performances in the subtasks of their literacy program at the baseline, midline and endline of the instructional period which allows them to monitor the learners' progress throughout the whole program.

A wide range of assessments were utilized by the reviewed literacy programs which included: field assessments, self-assessments, peer- assessments, external impact assessments, internal performance assessments, participative assessments, formal and summative assessments, diagnostic assessments, formative assessments, quantitative field research, cognitive tests, portfolio assessments, baseline-data comparison assessments, web-based assessments, periodic qualitative assessments, informal assessments, follow-up assessments…

This variety of assessments was demonstrated through the utilization of an even greater variety of metrics and resources. The following represent a set of examples of these demonstrations: surveys and questionnaires, testimonials, group discussions, individual and group interviews, team collaborations, feedbacks, checklists, logbooks, direct communication, online discussion forums, document analyses, participative observations, recordings of dialogues, plays, books, games, musical experiences, focus group discussions, anonymous feedback forms, facilitator reflections, data reports, learners' workbooks, final exams, written exams, oral exams, state exams, class tests, oral presentations, progress reports, field monitoring, e-mail and telephone communication, mobile applications, portfolios, learners' attendance and participation, learners' engagements, using new technology, open-ended and multiple choice exam questions , case studies, audio cassettes, activity books, personal reflections and dairies, posts on facebook…

The origin of the literacy program can be locally established through ministries or local NGOs, or established by an external source such as iNGOs, but also to be applied through the respective ministries or local NGOs, educational organizations, or other institutions. Depending on this origin, the stakeholders involved in the program in general, or in the assessment of the learners in particular is affected. In locally established programs, assessments are typically handled by the direct teachers or instructors of the program. In some cases, national language tests are provided by the ministries of education of the country. Moreover, when more stakeholders are involved, it can be observed that internal and external forms of assessment are more common. For instance, representatives of the external stakeholders would be responsible for some parts of the assessments such as field visits or data reports, while teachers would be responsible for facilitating group discussions or individual interviews.

In some of these campaigns, teachers are prepared and trained prior to the commencement of the program on the assessment strategies. This is an essential step in literacy programs because research on assessment practices has shown that there could be significant disparities between teachers' assessment beliefs and thoughts and their assessment practices (Soodmand Afshar & Ranjbar, 2021 ; Pehlivan Şlşman & Büyükkarcı, 2019). This was addressed by recommending the necessity of training teachers in gaining assessment proficiency to foster valid and reliable assessment results (Soodmand Afshar & Ranjbar, 2021 ; Pehlivan Şlşman & Büyükkarcı, 2019).

Categories

The categories for assessment are the constructs related to the subject and its corresponding learning goals. Typically literacy assessment constructs are extracted from the five pillars of reading and their specific complementary outcomes. Literacy assessment practices (n.d) suggest a set of constructs that teachers should focus on in the realm of literacy which are : "Cognitive development, oral language development, developing concepts of print, developing phonological and phonemic awareness, developing knowledge of letters and letter/sound correspondence, developing spelling skills (phonics, orthography and morphology), developing decoding and fluency skills, developing comprehension abilities, developing (written) compositional skills, developing interests, habits and a healthy self-concept as a reader and writer , developing knowledge, strategic skills and critical thinking, and reviewing environmental/contextual factors." Agora Center (2017) demonstrates the manifestations of the aforementioned literacy assessment constructs in their measurements of their students' levels in their required subtasks.

Courtneay (2018) constructed a clear and concise table incorporating a set of different literacy campaigns and their corresponding measured constructs pertaining to literacy (Appendix 1) . The author also includes the grade- level measured by each of these literacy campaigns. The different types of campaigns demonstrate a number of different assessment forms, alongside showing the categories measured by each of them.

RESEARCH on EFFECTIVE EVALUATION

Bhola (1990) defines evaluation as a process of information generation that consists of three approaches to information gathering, which are operational information, experiential information, and comparative and correlational information. This information must be defensible and organized, as well as methodically collected, Bhola (1990) states. Most importantly, however, it ought to be usable in the improvement of programs.

Evaluation should be conceptualized as a systemic and systematic response to the needs of different programs (Bhola, 1990, p. 54): "It should be systemic in the sense that it involves system thinking. The evaluator must see the evaluation exercise as linked with the literacy program system, the community or the performance system in which literacy skills will be utilized, and the surrounding social system, all at the same time".

Evaluation of any Mass Literacy Campaign is relevant to ensure technical efficiency. We have reviewed multiple literacy campaigns in order to determine how they deal with the challenge of monitoring and evaluating their training programs. Although many of the campaigns have unique

contexts, they have in common the goal of improving their practice and adjusting programs to meet the needs of their target groups.

According to Bhola (1990) there are various objectives, or task-related forms that evaluation might take. These are:

1. Needs assessment
2. Base-line survey
3. Learner evaluation
4. Achievement and attitude testing
5. Personnel evaluation
6. Curriculum evaluation
7. Institutional or organizational evaluation
8. Product evaluation
9. Impact evaluation
10. Cost-effectiveness evaluation, and
11. Self-evaluation

In most cases, the facilitators are those who collect the data required to assess the program's effectiveness. Their observations are used as first-hand evidence of the campaign's validity. As they are the ones who have the most interaction with learners, their insights are quite valuable for future development.

Depending on their size, many campaigns have an elaborate structure of supervision. Supervisor roles vary from general manager to local supervisor. The role of these supervisors is to inspect and address the issues within their campaign. Field-level supervisors visit and observe classes in order to collect evidence of the effectiveness of the programs. While the higher-ups review the reports of supervisors in the field. In most cases, meetings take place between facilitators and supervisors, for the sake of efficacy. These meetings have the goal of re-evaluating the practices of the campaign, and planning new approaches if some happen to not be working well.

A practice that had positive outcomes was trainee class observation. Trainee educators would attend classes and write reports on what they learned. The trainees reported high motivation, and described the practice as stimulating.

It should be noted that most evaluation of programs is done by the campaigns in question themselves, and only some of them have external impact assessment of the effectiveness of their work.

This is not necessarily bad. Although external evaluation uses outside specialists as consultants in the process of evaluation, this does not guarantee objectivity, and on the other end internal evaluation does not mean a lack of credibility (Bhola, 1990). In fact, both types of evaluations can be highly subjective, or entirely objective.

A report by the Agora Center (2017) suggests a research concept called Fidelity of Implementation (FOI), it means the accurate and consistent application of the agreed upon procedure. This research is used to evaluate the degree to which a project has been

implemented as planned. In turn, this allows evaluators to differentiate between the idea and the actual implementation of a project or program.

High FOI means that student learning can possibly be attributed to the impact of a project, leading to a recommendation to scale the project in the future. FOI research also makes it possible to identify the specific components of an intervention as having positive outcomes. Moreover, with low FOI, evaluators cannot attribute different outcomes to the project, and are thus unable to assess the quality of the same (Agora Center, 2017).

According to the Agora Center (2017), the data collected through FOI research serves several purposes:

1. To indicate where revisions in data collection tools were necessary;
2. To highlight where improvements in implementation were needed; and,
3. To attribute impact when combined with assessment data.

TEACHING METHODS and PROFESSIONAL DEVELOPMENT

Many literacy and numeracy campaigns and programmes are basically launched with the aim of reducing the number of illiterates; however, not all of them succeed in achieving desired outcomes. In her analytical report of large-scale adult literacy campaigns and programmes between 2000-2014 throughout the world, Hannman (2015) concluded that most of them have failed to attain their extremely ambitious goals. According to Lind (2008), the recruitment and training of literacy teachers is "the weakest point in literacy programmes" (p.88). She specifically points out that lowering the bar in hiring results in the recruitment of literacy facilitators who lack appropriate teaching skills, deep understanding of the teaching and learning processes, and experience (Lind, 2008).

Normally, recruiting appropriately skilled instructors and offering them learning opportunities for continuing professional development can play a decisive role in altering teachers' pedagogical practices in classrooms and consequently improve learners' outcomes (Guskey, 2002). Nevertheless, in the context of literacy campaigns and programmes, addressing literacy facilitators' concerns in the phases of recruitment, training, and professional development in a nationwide literacy teaching plan or strategy is easier said than done.

This part of the report provides a synthesis of the literature on a variety of teaching methods and practices used in many literacy programmes in different countries, namely: Brazil and Mexico, In addition it sheds light on the recruitment and training of literacy facilitators and the provision (or lack) of continuing professional development opportunities in these contexts.

In the context of Brazil, the Literate Brazil Programme (LBP) was launched in 2003 by Lula Da Silva, the Brazilian president from 2003 to 2010. According to Hannman (2015, p.57), the objectives of the LBP are:

- To contribute to the universalization of literacy among young people, adults and older adults in Brazil, and to support the continuation of their studies to higher levels; and

- To collaborate in the efforts of the federal districts and municipalities to universalize basic education.

With the Brazilian Federal Government being in charge of the technical and financial support, other local bodies, educational institutions, and private companies focus on implementing the LBP in the communities all over the country (Hannman, 2015). Concerning the training of literacy facilitators, the Ministry of Education signed agreements with NGOs to both participate in the mission of delivering literacy courses and providing pedagogical training. However, the evaluation of the implementation in 2006 led to the re-assignment of roles in which the recruitment and the provision of in-service training to teachers were under the responsibilities of the Public State and Federal Universities (Hannman, 2015).

In order to coordinate the efforts, all engaged higher education institutions assembled to create a national Training Network of Youth and Adult Literacy Teachers which, through a contract with the Ministry of Education, provides LBP with specialist technical services, including the design and development of the literacy curriculum (Hannman, 2015). Although literacy facilitators, coordinators, and sign language interpreters are considered volunteers, they receive a monthly grant in return for their service, the amount of money is paid directly by the Federal Government. The Ministry of Education of Brazil (as cited in Hannman, 2015) reported that 18,291 literacy teachers, coordinators, directors received training both in youth and adult education in 2009-2010. However, a detailed description of the duration of training was not mentioned.

In the context of Mexico, the National Institute for Adult Education (INEA) in partnership with several governmental and non-governmental bodies launched and implemented the literacy programme entitled the Education Model for Life and Work Education Model (Modelo Educación para la Vida y el Trabajo, MEVyT) in 1997 (Hanemann, 2017a). The ultimate aim of MEVyT is to provide learning opportunities to youths (above 15 years) and adults who have not had the chance to study in mainstream formal education. According to Castro-Mussot and de Anda (2007, p.121), the programme is designed to make learners:

- Engage in a meaningful education, one that responds to their needs and interests and the country requirements;

- Integrate competencies to improve their performance in different aspects of their lives;

- Strengthen attitudes and values to enhance their personal, family and social development; and

- Acquire skills that enable them to continue learning throughout their lives.

For achieving these objectives, the INEA recruited a strong team of literacy facilitators, around 80.000 personnel, 33 percent of whom are long-term volunteers. All the teaching staff receive pre-service training. They are required to attend the training of trainers programme (ToT), which is organized in forms of modular workshops, seminars, regular meetings and supervision sessions with the aim of exchanging experiences. The pre-service training makes the literacy facilitators acquainted with the teaching methodology, materials content, and assessment strategies and techniques for illiterates learning process (Hanemann, 2017a)

In addition, the INEA has launched another literacy programme entitled Bilingual Literacy for Life Programme (BLLP). The programme is taught in Spanish and local languages of the indigenous communities within the society of Mexico. The chief endeavor of the BLLP is to create life-long educational opportunities for aboriginal communities to overcome the barriers that stand between them and formal basic education and integration into the Spanish-speaking majority society (Hanemann, 2017).

In order to attain these goals, the INEA relies heavily on volunteers who have basic education level; high school students, graduates, and professionals who work in schools and local organizations. Another criteria for the recruitment is that these teaching personnel should be bilingual in Spanish and local languages of the indigenous communities. In addition, the insufficient educational expertise in literacy teaching propels the INEA's state-based technical staff to provide 72 hours for pre-service training and approximately 32 hours of professional training on the job, All this for ensuring the effective execution of the BLLP programme (Hanemann, 2017). The training focuses on several areas, namely: reinforcing the skills of reading and writing in the facilitators 'own native language, endowing the literacy facilitators with the knowledge of the pedagogy and teaching methods, teaching them an arsenal of teaching activities and the skills of classroom management and practices, as well as teaching them assessment techniques that they can use for evaluating learners outcomes. As a stimulus for the teaching staff to join in the literacy programme, they are paid a monthly salary of 722 pesos (US Dollar 58) (Hanemann, 2017).

In Mozambique, several literacy and numeracy programmes have been launched since gaining its dependence in 1975. The reality of illiteracy in the wake of independence was about 93% of the population (Hanemann, 2017).

With regards to the teaching methods used for teaching literacy to youth and adult illiterates, Henrique and Ireland (2007) reported that education schools and centers in Brazil have the freedom to adopt any teaching method relevant to the context of communities on the condition that illiterates will be able to demonstrate literacy and numeracy skills by the end of the learning period. Certainly, there is not a perfect method for teaching literacy and numeracy or any other subjects. Yet, while giving complete freedom to teachers might be an opportunity to be creative in their classrooms, it is also unequivocally a challenge as "teaching numeracy and literacy skills often requires special teaching skills…" (Lind, 2008, p.90).

After the implementation of the LBP, many challenges in the domain of literacy in Brazil are still persisting for the Secretariat for Continuing Education, Literacy and Diversity (SECAD) and the Ministry of Education. In addition to the inconsistency and obscurity of literacy programmes, the lack of continuing education, high numbers of leavers…, there is the obstacle of "managers, supervisors, coordinators, and teachers whose own training is insufficient to allow them to manage programs and develop methodologies, curricula, teaching materials and methods of evaluation" (Henrique and Ireland, 2007, pp:71-72). As mentioned before, setting up overly ambitious targets may be easy, but once a large-scale plan is put into action, complexity and uncertainty unfold at all levels. On the levels of teaching methodology and programme

management, it is evident that the lack of highly qualified human capital made the efforts geared toward youth and adult illiteracy insufficient.

REFERENCES

UNESCO database: https://uil.unesco.org/literacy/effective-practices-database-litbase

---

Agora Center. (2017). *GraphoGame™ Teacher Training Service. Evaluation Report.* Agora Center, University of Jyvaskyla, Finland. https://allchildrenreading.org/wp-content/uploads/2019/07/Agora-Center-Project-Evaluation.pdf

Ahmadein, G. (2019). Obstacles and opportunities for achieving the SDGs at higher education institutions: A regional Arab perspective. *Implementing the 2030*.

Allen, C., Metternicht, G., & Wiedmann, T. (2019). Prioritising SDG targets: Assessing baselines, gaps and interlinkages. *Sustainability Science, 14*(2), 421-438.

Allen, C., Reid, M., Thwaites, J., Glover, R., & Kestin, T. (2020). Assessing national progress and priorities for the Sustainable Development Goals (SDGs): experience from Australia. *Sustainability Science, 15*(2), 521-538. doi:10.1007/s11625-019-00711-x

Alomari, F., & Khataybeh, A. (2021). Understanding of sustainable development goals: The case for Yarmouk University Science students in Jordan. *Pegem Journal of Education and Instruction, 11*(2), 43-51.

ASER Centre (2017). *Annual Status of Education Report (Rural) 2016.* ASER Centre http://img.asercentre.org/docs/Publications/ASER%20Reports/ASER%202016/aser_2016.pdf

Assessment definition. (2015). The Glossary of Education Reform. https://www.edglossary.org/assessment/

Ayyappan, A. (Ed). Last update: 3 February 2020. Ageing Nepal: Basic Literacy Classes for Older Persons, Nepal. UNESCO Institute for Lifelong Learning. (Accessed on: 23 November 2021)

Azevedo, J. P., Hasan, A., Goldemberg, D., Iqbal, S. A., & Geven, K. (2020). Simulating the Potential Impacts of COVID-19 School Closures on Schooling and Learning Outcomes. Simulating the Potential Impacts of COVID-19 School Closures on Schooling and Learning Outcomes: A Set of Global Estimates. https://doi.org/10.1596/1813-9450-9284

Barnes, P. P. (1998). Theoretical orientations to reading and reading instructional practices of selected home-education parents in southwest Michigan. Andrews University.

Bhola, H. S. (1990). Evaluating "Literacy for Development" Projects, Programs and Campaigns. UNESCO Institute for Education.

https://unesdoc.unesco.org/ark:/48223/pf0000087728?10=null&queryId=ecac45c0-bb19-470d-8efd-b6a0f0dc4a64

CARE. Experience the power of girls' education. Web resource: Retrieved from:
https://bit.ly/3KQOmCm

Castro-Mussot. L & de Anda M (2007) Mexico's National Adult Education Programme In M.Singh
& L. M. Castro Mussot (Eds), *Literacy, Knowledge and Development: South-South Policy
Dialogue on Quality Education for Adults and Young People* (pp. 117-139) UNESCO
Institute for Lifelong Learning. Feldbrunnenstrasse 58, 20148 Hamburg, Germany.

Cf, O. (2015). Transforming our world: the 2030 Agenda for Sustainable Development. *United
Nations: New York, NY, USA.*

Chatzigianni, S. (2019). ESPERE: Schools of Forgiveness and Reconciliation, Colombia. UNESCO
Institute for Lifelong Learning. (Accessed on: 25 November 2021, 19:09 CET) from
https://uil.unesco.org/case-study/effective-practices-database-litbase-0/espere-schools-fo
rgiveness-and-reconciliation

Courtneay, K. (2018). *Literacy programs evaluation guide.* Reading Rockets.
https://www.readingrockets.org/article/literacy-programs-evaluation-guideueduc.2021.1010
42

DEval (2019), Shaping Sustainability. The 2030 Agenda in German Development Cooperation,
Focus Report, German Institute for Development Evaluation (DEval), Bonn.

Dolma, C. (2019.) ACKU Box Library Extension, Afghanistan. UNESCO Institute for Lifelong
Learning. (Accessed on: 23 November 2021, 11:24 CET) from
https://uil.unesco.org/case-study/effective-practices-database-litbase-0/acku-box-library-e
xtension-afghanistan

Ferguson, T., & Roofe, C. G. (2020). SDG-4 in higher education: Challenges and opportunities.
International Journal of Sustainability in Higher Education.

Global Dream. (2022). Universal FLN in the Aftermath of COVID-19: The Road Ahead [Video].
YouTube. https://www.youtube.com/watch?v=fVLlklLxlf0

Global Dream (n.d.) *What is Sumpoorn Nai Shikska (SNS)?* Global Dream Disruptive Literacy.
https://globaldream.guru/summary.aspx

Grainger-Brown, J., & Malekpour, S. (2019). Implementing the sustainable development goals: A
review of strategic tools and frameworks available to organisations. *Sustainability, 11*(5),
1381.

Guskey, T. R. (2002). Professional development and teacher change. *Teachers and teaching*,
8(3), 381-391.

Hanemann, U. (2015). Lifelong literacy: Some trends and issues in conceptualising and
operationalising literacy from a lifelong learning perspective. *International review of
education, 61*(3), 295-326.

Hanemann, U. (2017). *Bilingual Literacy for Life (BLL) / MEVyT Indígena Bilingüe (MIB),* Mexico. UNESCO Institute for Lifelong Learning. (Accessed on: 9 February 2022) from https://uil.unesco.org/case-study/effective-practices-database-litbase-0/bilingual-literacy-life-bll-mevyt-indigena

Hanemann, U. (2017a). *Education Model for Life and Work, Mexico*. UNESCO Institute for Lifelong Learning. (Accessed on: 9 February 2022) from https://uil.unesco.org/case-study/effective-practices-database-litbase-0/education-model-life-and-work-mexico

Hanemann, U. (2019). Examining the application of the lifelong learning principle to the literacy target in the fourth Sustainable Development Goal (SDG-4). *International review of education, 65*(2), 251-275.

Hanemann, U. (2016). Vanuatu Literacy Education Programme (VANLEP), Vanuatu. UNESCO Institute for Lifelong Learning. (Accessed on: 6 December 2021) from https://uil.unesco.org/case-study/effective-practices-database-litbase-0/vanuatu-literacy-education-programme-vanlep

Hanemann, U. (2016a). Universal Education Programme (UEP), Bangladesh. UNESCO Institute for Lifelong Learning. (Accessed on: 6 December 2021) from https://uil.unesco.org/case-study/effective-practices-database-litbase-0/universal-education-programme-uep-bangladesh

Hanemann, U. (2015a). Adult and Youth Literacy Programme, Liberia. UNESCO Institute for Lifelong Learning. (Accessed on: 23 November 2021) from https://uil.unesco.org/case-study/effective-practices-database-litbase-0/adult-and-youth-literacy-programme-liberia

Hanemann, U. (2013). Teaching the Nomads in the Wild, India. UNESCO Institute for Lifelong Learning. (Accessed on: 6 December 2021) from https://uil.unesco.org/case-study/effective-practices-database-litbase-0/teaching-nomads-wild-india

Hanemann, U. (2016b). Fight Against Illiteracy, France. UNESCO Institute for Lifelong Learning. (Accessed on: 25 November 2021) from https://uil.unesco.org/case-study/effective-practices-database-litbase-0/fight-against-illiteracy-france

Hanemann, U. (2014). The Lifelong Learning and Training Project, Chile. UNESCO Institute for Lifelong Learning. (Accessed on: 1 December 2021) form The Lifelong Learning and Training Project, Chile | UIL

Hanemann, U. (2017b). Radio Escolar CAJ - FM de Adentro 94.3, Argentina. UNESCO Institute for Lifelong Learning. (Accessed on: 6 December 2021) from https://uil.unesco.org/case-study/effective-practices-database-litbase-0/radio-escolar-caj-fm-adentro-943-argentina

Hanemann, U. (2011). En el país de Varela: Yo, sí puedo - Education Programme for Young People and Adults,Uruguay. UNESCO Institute for Lifelong Learning. (Accessed on: 4 December 2021) from https://uil.unesco.org/case-study/effective-practices-database-litbase-0/pais-varela-yo-si-puedo-education-programme-young

Hanemann, U. (2021). Parents as Literacy Supporters in Immigrant Communities (IPALS). UNESCO Institute for Lifelong Learning. (Accessed on: 4 December 2021) from https://uil.unesco.org/case-study/effective-practices-database-litbase-0/parents-literacy-supporters-immigrant-communities

Hanemann, U. (2015b). Last update: 6 February 2015. Quisqueya Learns With You, Dominican Republic. UNESCO Institute for Lifelong Learning. (Accessed on: 6 December 2021) from https://uil.unesco.org/case-study/effective-practices-database-litbase-0/quisqueya-learns-you-dominican-republic

Hanemann, U. (2014a). Livstycket, Sweden. UNESCO Institute for Lifelong Learning. (Accessed on: 1 December 2021) from https://uil.unesco.org/case-study/effective-practices-database-litbase-0/livstycket-sweden

Hanemann, U. (2016c). Youth and Adult Literacy and Basic Education Programme, Peru. UNESCO Institute for Lifelong Learning. (Accessed on: 6 December 2021) from https://uil.unesco.org/case-study/effective-practices-database-litbase-0/youth-and-adult-literacy-and-basic-education

Hanemann, U. (2017c). National Education Programme for Illiterate Youth and Adults through Information and Communication Technologies, Senegal. UNESCO Institute for Lifelong Learning. (Accessed on: 4 December 2021) from https://uil.unesco.org/case-study/effective-practices-database-litbase-0/national-education-programme-illiterate-youth-and

Hanemann, U. (2016d). Programme of Mother Language Literacy (PALMA), Brazil. UNESCO Institute for Lifelong Learning. (Accessed on: 6 December 2021) from https://uil.unesco.org/case-study/effective-practices-database-litbase-0/programme-mother-language-literacy-palma-brazil

Hanemann, U. (2015c). Non-Formal and Continuing Education Programme, Bhutan. UNESCO Institute for Lifelong Learning. (Accessed on: 4 December 2021) from https://uil.unesco.org/case-study/effective-practices-database-litbase-0/non-formal-and-continuing-education-programme

Hanemann, U. (2017d). Books for rural areas of VietNam, Viet Nam. UNESCO Institute for Lifelong Learning. (Accessed on: 25 November 2021) from https://uil.unesco.org/case-study/effective-practices-database-litbase-0/books-rural-areas-viet-nam-viet-nam

Hanemann, U. (2016e). Use of Radio in a Nomadic Education Programme, Nigeria. UNESCO Institute for Lifelong Learning. (Accessed on: 6 December 2021) from

https://uil.unesco.org/case-study/effective-practices-database-litbase-0/use-radio-nomadic-education-programme-nigeria

Hanemann, U. (2015d). Women's Literacy in Angola and Mozambique, Mozambique. UNESCO Institute for Lifelong Learning. (Accessed on: 6 December 2021) from https://uil.unesco.org/case-study/effective-practices-database-litbase-0/womens-literacy-angola-and-mozambique-mozambique

Hanemann, U. (2012). Family Literacy Programmes, Training, and Services, Canada. UNESCO Institute for Lifelong Learning. (Accessed on: 25 November 2021) from https://uil.unesco.org/case-study/effective-practices-database-litbase-0/family-literacy-programmes-training-and-services

Hanemann, U. (2012a). Adult Education Centres in Samtskhe-Javakheti, Georgia. UNESCO Institute for Lifelong Learning. (Accessed on: 23 November 2021) from https://uil.unesco.org/case-study/effective-practices-database-litbase-0/adult-education-centres-samtskhe-javakheti-georgia

Hanemann, U. (2012b). Münster Prison Library, Germany. UNESCO Institute for Lifelong Learning. (Accessed on: 4 December 2021) from https://uil.unesco.org/case-study/effective-practices-database-litbase-0/munster-prison-library-germany

Hanemann, U. (2016f). The Parkari Literacy Project, Pakistan. UNESCO Institute for Lifelong Learning. (Accessed on: 4 December 2021) from https://uil.unesco.org/case-study/effective-practices-database-litbase-0/parkari-literacy-project-pakistan

Hanemann, U. (2016g). Integral School Literacy Programme, Colombia. UNESCO Institute for Lifelong Learning. (Accessed on: 30 November 2021) from https://uil.unesco.org/case-study/effective-practices-database-litbase-0/integral-school-literacy-programme-colombia

Hanemann, U. (2021a). Thabyay eLearning Platform, Myanmar. UNESCO Institute for Lifelong Learning. (Accessed on: 6 December 2021) from https://uil.unesco.org/case-study/effective-practices-database-litbase-0/thabyay-elearning-platform-myanmar

Hanemann, U. (2010). Hilti Family Literacy Programme, Malta . UNESCO Institute for Lifelong Learning. (Accessed on: 30 November 2021) from https://uil.unesco.org/case-study/effective-practices-database-litbase-0/hilti-family-literacy-programme-malta

Hanemann, U. (2016h). Adult Literacy Using Information Technology, Lebanon. UNESCO Institute for Lifelong Learning. (Accessed on: 23 November 2021) from https://uil.unesco.org/case-study/effective-practices-database-litbase-0/adult-literacy-using-information-technology

Hanemann, U. (2014b). Write On, Ireland. UNESCO Institute for Lifelong Learning. (Accessed on: 6 December 2021) from
https://uil.unesco.org/case-study/effective-practices-database-litbase-0/write-ireland

Hanemann, U. (2012c). Participatory Liberating Literacy Instrumented by Active Communities (APLICA), Angola. UNESCO Institute for Lifelong Learning. (Accessed on: 4 December 2021) from
https://uil.unesco.org/case-study/effective-practices-database-litbase-0/participatory-liberating-literacy-instrumented

Hanemann, U. (2016i). Initiative for Adult Education, Austria. UNESCO Institute for Lifelong Learning. (Accessed on: 30 November 2021) from
https://uil.unesco.org/case-study/effective-practices-database-litbase-0/initiative-adult-education-austria

Hanemann, U. (2016j). Basic Education for Young People and Adults, Ecuador. UNESCO Institute for Lifelong Learning. (Accessed on: 23 November 2021) from
https://uil.unesco.org/case-study/effective-practices-database-litbase-0/basic-education-young-people-and-adults-ecuador

Hanemann, U. (2016k). Challenges of the Countryside – a Rural Literacy Programme for Adults in Slovenia, Slovenia. UNESCO Institute for Lifelong Learning. (Accessed on: 25 November 2021) from
https://uil.unesco.org/case-study/effective-practices-database-litbase-0/challenges-countryside-rural-literacy-programme

Hanemann, U. (2013a). Basic Competence in Working Life, Norway. UNESCO Institute for Lifelong Learning. (Accessed on: 23 November 2021) from
https://uil.unesco.org/case-study/effective-practices-database-litbase-0/basic-competence-working-life-norway

Hanemann, U. (2013b). Alfabetizando com Saúde (Learning to Read and Write in Good Health), Brazil. UNESCO Institute for Lifelong Learning. (Accessed on: 23 November 2021) from
https://uil.unesco.org/case-study/effective-practices-database-litbase-0/alfabetizando-com-saude-learning-read-and-write

Henriques, R., & Ireland, T. (2007). Brazil's national programme for adult and youth education. In M. Singh & L. M. Castro Mussot (Eds), *Literacy, Knowledge and Development: South-South Policy Dialogue on Quality Education for Adults and Young People* (pp. 61-90) UNESCO Institute for Lifelong Learning. Feldbrunnenstrasse 58, 20148 Hamburg, Germany.

Herbert, A., Saavedra, J., Marr, L., & Jenkins, R. (2021, November 4). The urgent need to focus on foundational skills. World Bank Blogs. Retrieved January 5, 2022, from
https://blogs.worldbank.org/education/urgent-need-focus-foundational-skills

Hughes, P. (2005). Why access to TVET for all is essential if education for all is to be achieved. *Prospects*, *35*(3), 253-267.

Ikpa, V. W. (2016). Politics, adequacy, and education funding. *Education*, *136*(4), 468-472.

Khasnabis C, Heinicke Motsch K, Achu K, et al., editors. Community-Based Rehabilitation: CBR Guidelines. Geneva: World Health Organization; 2010. Non-formal education. Available from: https://www.ncbi.nlm.nih.gov/books/NBK310920/

King, K. (2017). Lost in translation? The challenge of translating the global education goal and targets into global indicators. *Compare: A Journal of Comparative and International Education, 47*(6), 801-817.

Kumar, S., Kumar, N., & Vivekadhish, S. (2016). Millennium development goals (MDGS) to sustainable development goals (SDGS): Addressing unfinished agenda and strengthening sustainable development and partnership. *Indian journal of community medicine: official publication of Indian Association of Preventive & Social Medicine, 41*(1), 1

Lancet (10 June, 2021). Bilaj, M., et al. Parental education and inequalities in child mortality: a global systematic review and meta-analysis. Retrieved from: https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(21)00534-1/fulltext

Lewis, G., Jones, B., & Baker, C. (2012). Translanguaging: Origins and development from school to street and beyond. *Educational Research and Evaluation*, *18*(7), 641-654.

Literacy assessment practices. (n.d.). The Literacy Bug. https://www.theliteracybug.com/planning-and-assessment

Lind, A. (2008). *Literacy for all: Making a difference*. Paris: UNESCO-IIEP

Malik, R. S. (2018). Educational challenges in 21st century and sustainable development. *Journal of Sustainable Development Education and Research*, *2*(1), 9-20.

McKay, V. (2018). Literacy, lifelong learning and sustainable development. *Australian Journal of Adult Learning, 58*(3), 390-425.

Mednick, F. (n.d.). About us. TWB. Retrieved December 13, 2021, from https://teacherswithoutborders.org

National Institute of Child Health and Human Development (NICHD). (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: Reports of the subgroups (NIH Publication No. 00-4754). Washington, DC: U.S. Government Printing Office.

Nwachukwu, P. O. (2014). Funding education for sustainable development in Nigeria: Challenges and way forward. *Journal of Education and practice, 5*(20), 51-56.

Pehlivan Şışman, E., & Büyükkarcı, K. (2019). A review of foreign language teachers' assessment literacy. *Sakarya University Journal of Education*, 628–650. https://doi.org/10.19126/suje.621319

Point, L. (2004). A closer look at the five essential components of effective reading instruction: A review of scientifically based reading research for teachers. Naperville, IL: Learning Point Associates.

PRB (2021). Population Resource Bureau. The effect of girls' education on health outcomes: fact sheet. Retrieved from: https://www.prb.org/resources/the-effect-of-girls-education-on-health-outcomes-fact-sheet/

Rieckmann, M. (2017). *Education for sustainable development goals: Learning objectives*: Unesco Publishing.

Sachs, J., Kroll, C., Lafortune, G., Fuller, G., & Woelm, F. (2021). *Sustainable development report 2021*: Cambridge University Press https://books.google.be/books?id=SUVFEAAAQBAJ&printsec=frontcover&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false

Santrock, J. (2017). *Educational psychology* (6th ed.). McGraw Hill.

Sefton-Green, J., Marsh, J., Erstad, O., & Flewitt, R. (2016). Establishing a research agenda for the digital literacy practices of young children. *A White Paper for COST Action IS1410*.

Soodmand Afshar, H., & Ranjbar, N. (2021). EAP teachers' assessment literacy: From theory to practice. *Studies in Educational Evaluation, 70*, 101042. https://doi.org/10.1016/j.st

SRI and EdCIL (India) Limited (2014). *National Sample Survey of Estimation of Out-of-School Children in the Age 6-13 in India.* https://www.education.gov.in/en/sites/upload_files/mhrd/files/upload_document/National-Survey-Estimation-School-Children-Draft-Report.pdf

The World Bank, UNESCO, & UNICEF. (2021, December). The State of the Global Education Crisis: A Path to Recovery (No. 166631). World Bank Publications. https://documents1.worldbank.org/curated/en/416991638768297704/pdf/The-State-of-the-Global-Education-Crisis-A-Path-to-Recovery.pdf

UNESCO (2017). *Literacy Rates Continue to Rise from One Generation to the Next.* Fact Sheet No. 45 FS/2017/LIT/45 http://uis.unesco.org/sites/default/files/documents/fs45-literacy-rates-continue-rise-generation-to-next-en-2017_0.pdf

UNESCO (2019). *Meeting Commitments. Are countries on track to achieve SDG-4?* UNESCO Institute for Statistics. http://uis.unesco.org/sites/default/files/documents/meeting-commitments-are-countries-on-track-achieve-SDG-4.pdf

UNESCO, U., UNPFA, U., UNICEF, & UN, W. (2015). Incheon declaration and framework for action for the implementation of sustainable development goal 4: Paris: UNESCO.

UNESCO. (n.d.). Literacy. Retrieved December 13, 2021, from https://en.unesco.org/themes/literacy

UNESCO. (n.d.-a). *Learning Poverty – Global Alliance to Monitor Learning*. Retrieved March 1, 2022, from https://gaml.uis.unesco.org/learning-poverty/

UNICEF. (2018–2021). Youth and adult literacy rates [UNICEF Global database on literacy rate].

UNICEF (n.d.). *Education: Every girl and boy in school and learning.* Retrieved on 2020, October 11, from https://www.unicef.org/india/what-we-do/education

United Nation. (2020, July). Literacy for life, work, lifelong learning and education for democracy (No. 73/145). https://documents-dds-ny.un.org/doc/UNDOC/GEN/N20/188/99/PDF/N2018899.pdf?Open Element

USAID Infographic. 2021. An educated girl has a ripple effect. Retrieved from: https://www.usaid.gov/girl/infographic-ripple-effect

Uvalic-Trumbic, S., & Daniel, J. (2016). Sustainable Development Begins with Education. *Journal of Learning for Development, 3*(3), 3-8.

Zholdoshalieva, R. (2018). Cell-Ed: innovative education through cell phones, United States of America. UNESCO Institute for Lifelong Learning. (Accessed on: 25 November 2021) from https://uil.unesco.org/case-study/effective-practices-database-litbase-0/cell-ed-innovative-education-through-cell-phones

APPENDIX 1

Literacy Programs: Evaluation Guide

Name of Literacy Program	Grade Levels	Leveled Texts	Comprehension Strategies	Diverse Vocabulary Work	Fluency Work	Word Work/Spelling	PA and/or Phonics	Writing Component	Embedded Assessments	Suggested Scope & Sequence	Differentiated Lesson Support	Technology
Achieve 3000	K-2	●		●	●	●	●		●		●	
Cooperative Integrated Reading and Composition (CIRC)	2-8		●		●	●	●					
DaisyQuest	PK-2						●					●
Dialogic Reading	PK-K		●	●								
Doors to Discovery	PreK						●					
Earobics	PK-3	●			●		●					
Edgenuity/ Compass Learning MyPath (online)	6-12	●							●			●
Fast ForWord	K-12				●		●					●
Fast Track Reading	3-8	●					●					
Headsprout	K-5		●	●	●		●		●	●		●
Ladders to Literacy	K-3					●	●		●			
Leveled Literacy Intervention (LLI) Fountas & Pinnell	K-5	●	●	●	●		●		●			
Lexia Reading Core5	K-5				●		●		●	●	●	●
Lindamood Phoneme Sequencing (LiPS)	PK-2						●					
Literacy Express	PK-8				●		●	●				
Open Court Reading	K-5			●			●	●	●			●
Phonological Awareness Training	PK-2						●					
Quick Reads by Pearson	2-6			●	●							
Read 180	4-9	●	●	●	●	●			●	●	●	●
Read Naturally	1-8				●	●	●		●		●	●
Reading Mastery	K-6		●	●	●	●	●		●			
Reading One-to-One	K-5	●					●		●			
Reading Recovery	K-12	●					●	●	●			
Sound Partners – Voyager	K-3						●					
SpellRead	1-12				●	●	●	●				
SRA Corrective Reading	3-12			●	●		●			●		
Start Making a Reader Today (SMART)	PK-2		●		●		●					
Stepping Stones to Literacy – Voyager	PK-1						●					
Success For All	K-5		●	●	●		●	●	●		●	●