

Girls' and women's literacy with a lifelong learning perspective:

issues, trends and implications for the Sustainable Development Goals

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Foreword

In many countries, girls and women remain subject to multiple forms of discrimination in all spheres of their lives, including education. Girls are still often less likely to go to school, this missed opportunity generates more discrimination, holding them back simply because of their gender.

Girls typically face a distinctive set of barriers to learning, especially when they reach post-primary levels of education. At that age, girls drop out of school for many reasons: early marriage and pregnancy; violence in and around schools; poverty; traditions; as well as lack of gender-sensitive learning contents and environments.

The lack of progress in reducing the proportion of illiterate women worldwide constitutes a major concern, leading to calls for change in approaches to literacy. Women are often the poorest and most marginalized in social, political and economic domains.

In the framework of the first Award Ceremony of the UNESCO Prize for Girls' and Women's Education, UNESCO, in collaboration with the National Commission of China for UNESCO, is organizing an International Seminar on Girls' and Women's Education, which will take place in Beijing, China in June 2016. In order to feed into deliberations of the seminar, this research paper has been developed within the framework of the UNESCO International Literacy Prizes to provide an overview of the global state and insights regarding girls' and women's literacy. The UNESCO Confucius Prize for Literacy, as one of the two prizes for literacy currently managed by UNESCO and which enjoys the support of the People's Republic of China, rewards outstanding programmes implemented by individuals, governmental agencies, or non-governmental organizations (NGOs) engaged in literacy for rural adults and youth, particularly women and girls.

This report outlines the key issues related to women and girls' literacy to date, draws lessons from good practices of the Confucius Prize and outlines selected implications for the Sustainable Development Goals (SDGs), in particular SDG 4: Ensuring inclusive and equitable quality education and promote lifelong learning opportunities for all.



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Abbreviations

ANER	adjusted net enrolment ratio
CEDAW	UN Convention on the Elimination of All Forms of Discrimination Against Women
CRC	UN Convention on the Rights of the Child
DHS	Demographic and Health Survey (USAID)
ECCE	early childhood care and education
EFA	Education for All
GER	gross enrolment ratio
GMR	Global Monitoring Report
GPI	Gender Parity Index
ICT	information and communications technology
LAMP	Literacy Assessment and Monitoring Programme (UNESCO)
LIFE	Literacy Initiative for Empowerment
LLL	lifelong learning
MDG	Millennium Development Goal
NGO	non-governmental organization
PIACC	Programme for the International Assessment of Adult Competencies (OECD)
SDG	Sustainable Development Goal
STEP	Skills Towards Employment and Productivity (World Bank)
UPE	universal primary education
UIL	UNESCO Institute for Lifelong Learning
UIS	UNESCO Institute for Statistics

Introduction

Why literacy?

Why women and girls?

The global literacy challenge is gendered. An estimated 757 million adults and 115 million young people globally lack basic literacy (UIS, 2015, p. 5), for the past two decades women have accounted for approximately two thirds of all illiterate adults, and the gender gap is nearly as wide among young people (UIS, 2015, p. 4). Women's illiteracy remains stubbornly high at 477 million, falling just 1 per cent since 2000. Half the adult women in South and West Asia and sub-Saharan Africa cannot read or write (UIS, 2015, p. 3).

Gendered educational disparity begins at the primary and continues at the secondary level of education. Despite significant increases in girls' enrolment in basic education, fewer than half of countries with data have achieved gender parity at the primary and secondary levels (UNESCO, 2015). Girls comprise the majority of out-of-school children and young people – 15 million school-age girls worldwide will never set foot in a classroom (UNESCO, 2015). Quality and equality in education are significant factors in keeping girls out of education, preventing learning and curtailing literacy.

UNESCO has long argued that literacy is key to the twenty-first century (UIL, 1997, Resolution 2) and fundamental for participating in society (UNESCO, 2015, p. 136). UNESCO has recognized literacy as a lever to attain a range of rights, skills for work, and socio-economic participation and empowerment, particularly for women and girls. Women make up the vast majority of the informal employment and unpaid work sectors, earn on average just 60–75 per cent of men's wages, contribute only 22 per cent of national parliamentarians, and are disproportionately affected by gender violence (UN Women website, accessed May 2016). But literacy can address these social inequalities: it correlates with higher levels of work in more stable and better-paid jobs, increased participation in social and political activities, and greater financial autonomy (UNESCO, 2006, pp 138–44). Women's literacy has intrinsic value, building confidence and self-reliance (Chisholm and Hasan, 2009). Women's literacy also has instrumental value. Maternal literacy, for example, correlates with better health outcomes for women and their children, reduced child mortality, greater enrolment of children in school, and reduced poverty at the family and household level (UNESCO, 2006, pp. 138–44), all of which have been central to the Millennium Development Goals (MDGs).

The seventeen universal Sustainable Development Goals (SDGs) adopted on 25 September 2015 are underpinned by education and literacy in a lifelong learning framework. They recognize and advance the interconnectedness of targets to realize human rights, gender

equality and the empowerment of girls and women. The Incheon Declaration, *Education 2030*, commits to ensuring that 'all adults and youth, especially women and girls, achieve relevant and recognized functional literacy and numeracy proficiency levels and acquire life skills'(UNESCO, 2015b, p. 10). Lifelong or 'lifewide' learning (UNESCO, 2014b), comprising adult education and learning, and literacy and basic skills, should facilitate learning opportunities for people of all ages, enabling them to acquire the foundational and broader knowledge, skills and competencies that are critical for individuals.

The primacy of literacy in this lifelong learning framework was stressed at UNESCO's 2015 General Conference, which made recommendations on adult learning and education. This Recommendation reaffirmed literacy as an 'indispensable foundation' of lifelong learning (UNESCO, 2016, p. 145), defining literacy on a 'continuum of learning and proficiency levels', which includes 'the ability to read and write, to identify, understand, interpret, create, communicate and compute, using printed and written materials, as well as the ability to solve problems in an increasingly technological and information-rich environment' (UNESCO, 2016, p. 146).

The SDGs encourage viewing literacy as a right and a critical buttress for development. Approaching this with a focus on gender equality and female empowerment allows us to also develop a more nuanced understanding of 'how different kinds of literacy emerge from or support different development approaches and how women engage with such processes of change' (Robinson-Pant, 2014, p. 7).

This background paper sets the scene for literacy, gender and equality on the global stage. It outlines the key trends and issues in literacy and equality to date, and promotes the place of literacy in the post-2015 SDGs, with a particular focus on SDG4, which commits us to 'ensure inclusive and equitable quality education and promote lifelong learning opportunities for all' (United Nations, 2015).

Setting the scene: literacy, gender and equality on the global development stage

Background

Literacy for adults, young people and children has been a focus of the global community since the inception of development goals and policy. UNESCO in particular has been committed to literacy as a part of education - a fundamental human right since the formation of the Organization in 1946 (UNESCO, 2006; Wagner, 2011), a commitment which has been reaffirmed in a number of subsequent declarations. The notion of functional literacy, which emphasizes the use of a broad base of literacy skills, engaging in all activities for individual and community functioning, was approved by UNESCO in 1978. By 1990 UNESCO had started to recognize literacy as a skill that is connected to and contributes to

individual well-being, including the ability to both create and engage with printed and written materials in a variety of contexts (UNESCO, 2006). This was developed further in the 2009 Belém Framework for Action, which saw literacy as a continuum of skills which can facilitate individuals' goals in work and life, and full participation in society (Chisholm and Hasan, 2009; UNESCO, 2015, p. 137).

UNESCO has also worked successfully to raise the profile of literacy through evolving testing mechanisms, which provide internationally comparable data that has started to recognize literacy as a continuum. The Organization has mobilized support and provided examples of best practice for the expansion of quality adult education programming and funding, with literacy as a core component.

Literacy was a central part of the Education For All (EFA) movement launched in 2000. Goals 3 and 4 addressed youth and adult literacy and skills, and provided a vital frame to identify progress and monitoring. EFA Goal 3 was directed at 'ensuring that the learning needs of all young people and adults are met through equitable access to appropriate learning and life-skills programmes'. Although there is no specific target for monitoring youth literacy, the focus on life skills is a precursor to lifelong learning. EFA Goal 4 called for a 50 per cent improvement in levels of adult literacy by 2015, especially for women, and equitable access to basic and continuing education for all adults. The adult literacy rate has been used to measure progress, with adults aged 15 and above characterized as either literate (defined as able to read and write a short, simple statement) or illiterate. Women were emphasized in EFA Goal 4, but there was no target for gender parity in adult literacy.

Although literacy did not feature as a goal in the MDG framework, youth literacy rates were used as indicators to report progress towards universal primary education (UPE) (MDG 2) and gender equality in education (MDG 3). It has been argued that particular skills or forms of knowledge associated with adult literacy are threaded throughout the achievement of the MDGs (Robinson, 2005; Tagoe, 2011).

Literacy and its gendered dimensions have also been a central part of the development landscape beyond and preceding EFA and the MDGs. The UN Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) (1979) and the UN Convention on the Rights of the Child (CRC) (1989) recognize education as a fundamental right. CEDAW argues for equal access to opportunities for functional literacy, whereas the CRC leans towards the elimination of illiteracy. In the Beijing Declaration and Platform for Action, adopted by the 189 UN Member States in 1995, education and training of women was one of the twelve critical areas of concern. The Beijing Declaration committed states to equal access and financial resources for women's and girls' lifelong education, and the eradication of women's illiteracy.

UNESCO's Global Partnership for Women and Girls Education, launched in 2011, emphasizes quality education for girls and women at the secondary level and in the area of literacy; its Literacy Initiative for Empowerment (LIFE) (2005–15) targeted women; and

UNESCO's international literacy prizes regularly highlight the salience of meeting women's and girls' needs for literacy in specific contexts. Similar to the values underpinning ActionAid's Reflect methodology, case studies from the prize winners (presented in Section 2 of this report) show how literacy acquisition is often linked to female and community-level empowerment and a rights-based approach, engendering positive change against harmful traditional practices, forms of marginalization and deprivation (Fiedrich and Jellema, 2003).

Despite rhetoric and good practices recognizing the need to go beyond parity in literacy action, literacy data and measurement tools have for a long time remained stuck on binary understandings of both literacy/illiteracy, and gender as girls/boys or men/women. Data on gender in literacy and education has focused during the EFA and MDG period on numbers through statistical parity – equal numbers of boys and girls, men and women, in education. The Gender Parity Index (GPI) is used to present the ratio of boys to girls enrolled at different levels of education.

Yet gender parity is only one step towards gender equality. Inequality and discrimination on the basis of gender operates globally to the detriment of women, girls and their education. Even with huge progress towards parity in enrolment at the primary level, myriad inequities including gender violence, child marriage, and other gender norms in families, communities and broader society form major barriers against women's and girls' attainment of literacy and lifelong learning. In their holistic approach to development, the SDGs recognize the importance of an equal and conducive environment for the acquisition, use and advancement of literacy skills, as well as recognizing that literacy skills themselves positively contribute to the achievement of the full range of SDGs.

Finally, the criticality of paying attention to both women's literacy and girls' education at the same time and as part of the same continuum cannot be overstated. Girls' and women's literacy has generally been seen as an outcome, with less attention given to literacy learning as a process. In part this mirrors the insufficient attention to learning processes in the wider education and development landscape (Barrett, 2011), but it also reflects a prevalent instrumental view of literacy as the key by which other forms of adult education such as health or the broader range of skills for work might be accessed. As the 2030 Agenda for Sustainable Development argues, the 'interlinkages and integrated nature of the Sustainable Development Goals are of crucial importance' (United Nations, 2015) – it is lifelong learning, and all forms of equality, particularly gendered equality, that most clearly cut across this Agenda for global change.

Measuring literacy

Measures of literacy, what counts as being literate and what it means to measure literacy, have been long contested, with concepts of what literacy 'is' often acknowledged in parallel (UNESCO, 2006; Robinson-Pant, 2008). For a long time, literacy statistics relied on binary rates, which could not capture the full range of functional and expanded notions of literacy

skills, and which saw being either 'literate' or 'illiterate' as absolutes, rather than points on a continuum. A wide range of studies and research working under the umbrella of 'new literacy studies' have further critiqued the ways in which even this continuum still holds a view of 'literacy' as a single concept, which does not reflect the diversity of people's lives and literacy practices (Street, 2001; Robinson-Pant, 2004; Rogers and Street, 2012). Approaches to measuring literacy have been hampered by the fact that self-reported literacy rates often yield very different results from those obtained through practical demonstrations, such as reading a simple sentence in front of a researcher, meaning that rates have become harder to compare over time (UNESCO, 2015). In other data the number of years of schooling completed has been taken as a proxy for literacy, with seven years of schooling being a common threshold (Esposito et al., 2011). Methodologies and definitions thus vary by country and over time, and analyses need to be approached with caution.

Since 2000, however, there have been major attempts to improve the assessment and global comparability of literacy skills. These have followed the change in the definitional thinking around functional literacy, from being able to read and/or write a simple sentence, to understanding literacy as a continuum. Self-reported or household-reported statements on literacy are now also being supported by reading tests. For example:

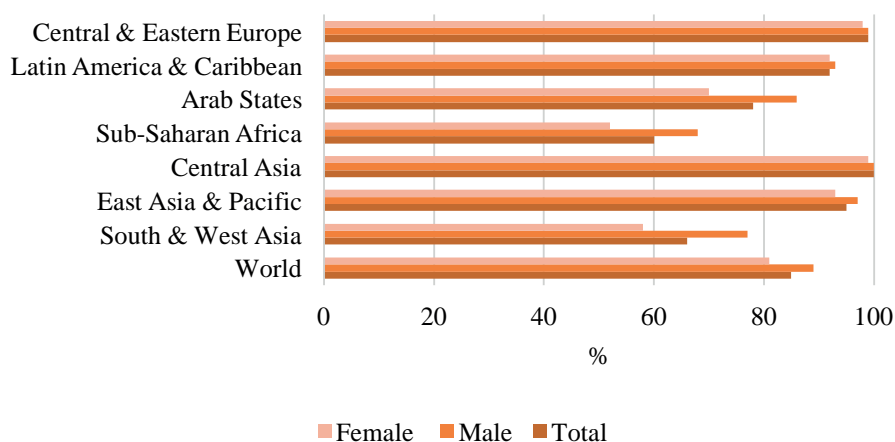
- USAID's Demographic and Health Surveys (DHS) now apply a reading test of basic literacy. This direct assessment is 'only administered to respondents who did not attend secondary school or higher because the latter are assumed to be literate'. Respondents are graded on a tripartite scale. However, the DHS remains predominantly focused on assessing basic literacy, and the assumption that primary school attendees are not all functionally literate raises serious concerns about education quality (see Section 2);
- OECD's Programme for the International Assessment of Adult Competencies (PIAAC) directly assesses literacy in adults, using a computer, in twenty-five societies that are viewed as highly literate. The PIAAC takes a skills-based approach to literacy, and is particularly valuable both for the populations it can identify within these highly literate societies who have very low levels of proficiency in reading, and also because it links literacy to different forms of work and can show that more skilled occupations can help to develop proficiency. The World Bank's STEP (Skills towards Employment and Productivity) surveys take a similar approach in middle-income countries;
- UNESCO's Literacy Assessment and Monitoring Programme (LAMP) responds to an increased emphasis beyond functional literacy and towards literacy as a spectrum of skills by defining three levels of literacy attainment. It has sampled adults in Jordan, Mongolia, Palestine and Paraguay, but the complexity of the measurement as well as delays in the development meant that some countries initially willing to participate, such as Kenya, developed their own approaches, or joined other surveys.

Literacy data¹

Despite the flaws and irregularities with the measurement of literacy and literacy data noted above, some gradual progress has been made in addressing illiteracy globally. China experienced one of the fastest declines in illiteracy rates worldwide. The literacy rate in South Africa has continued to improve. India has also reduced the absolute number of its illiterate population, although it remains the highest in the world. Recent research indicates that 'most countries are on a trajectory of slow but definite improvement in the literacy rates of young female adults over time' (UNESCO, 2015, p. 144).

However, progress on increasing literacy rates has been patchy, and the global illiterate population has remained stubbornly high: the rate of adult illiteracy only dropped from 18 per cent in 2000 to 14 per cent in 2015, meaning that EFA Goal 4 was missed (UNESCO, 2015). Those countries and regions in which literacy rates were the lowest – in South and West Asia (66 per cent) and sub-Saharan Africa (60 per cent) – also had the widest gender disparities. The GPI in sub-Saharan Africa is 0.76, but the literacy gender gap remains at its widest in South and West Asia, which has a GPI of 0.75 (Figure 1).

Figure 1 Adult literacy rate by region and gender, 2013



Source: UIS (2015), p. 3.

Three-quarters of the global illiterate population live in South and West Asia or sub-Saharan Africa, and ten out of the eleven countries with 50 per cent or fewer adults with basic literacy skills are in sub-Saharan Africa. In these two regions improvements in the adult literacy rate

¹ Note that the UNESCO Institute for Statistics (UIS) reports literacy in census decades because censuses are not annual, and literacy rates change more gradually than for instance enrolment rates. The data here dated as 2011 are for the decade 2005–14 (UIS, 2013). More recent data from UIS published in 2015 are also referenced.

were not sufficient to keep pace with population growth, so that, for example, in sub-Saharan Africa the total number of illiterate adults increased from 133 million in 1990 to 182 million in 2011 (UIS, 2013, p. 13). In all regions, adult illiteracy rates were higher for women.

Poor rural women are among the most likely to be illiterate. Illiteracy is thus gendered and spatialized. The factors of race, class and ethnicity intersect, which means it is centred in the most vulnerable groups and nations. It has been seen as both the symptom, and to some extent the cause, of educational, gendered and other forms of global inequality between groups and nations (Robinson-Pant, 2000). The proportion of the world's illiterate adults living in sub-Saharan Africa, for example, will have increased from 15 per cent in 1990 to 26 per cent in 2015 (UNESCO, 2013/4, p. 4). West Africa has a particularly poor record for adult literacy: the five countries with the world's lowest literacy rates – below 35 per cent – are in this region, and women's literacy rates are especially low in these countries, at below 25 per cent (UNESCO, 2013/4, p. 72).

While the global adult literacy rate is 85 per cent, the global youth literacy rate increased to 91 per cent in 2015. This has generally been attributed to significant improvements in school enrolment at the primary and secondary levels, particularly for girls. Countries in which educational access and quality continue to be poor tend to have a legacy of illiteracy among young people and adults, and wealthier or increasingly wealthy countries such as Saudi Arabia, China and Singapore have experienced the fastest declines in illiteracy, with an 83 per cent decline since 2000 in Kuwait, compared with a 1 per cent decline in Guinea, for example. Mainly poor countries such as Cambodia, Chad and Mozambique continue to be furthest from achieving the target of EFA 4 (UNESCO, 2015, p. 137). Again, in sub-Saharan Africa increases in youth literacy have not kept pace with population growth, so the absolute number of illiterate young people increased between 1990 and 2011.

Worryingly, the progress there has been in adult literacy rates might reflect younger, better-educated people replacing older, less-educated ones in the population as a whole, rather than the implementation of effective literacy programmes (UNESCO, 2015, p. 135). Formal education, particularly universal primary and increasingly junior secondary schooling, has been prioritized in both frameworks and funding, with adult goals and programming being relatively neglected (Wagner, 2011; Unterhalter, 2014). However, as Section 3 will show, adults and young people, especially women and girls, are central to the success of the SDG agenda, and their rights, participation, knowledge and literacy practices need to be recognized, funded and developed if lifelong learning goals are really to be met.

Challenges and change

Increasing the acquisition of literacy is a challenge not solely for developing nations but for our global society. This is particularly important to the SDGs, which harness commitments from all countries, not only developing nations. Illiteracy is deeply and closely intertwined with inequality, particularly gender inequality, and highlights societal stratifications. This has

been shown through data collection and analysis for EFA and the MDGs (Section 2), and will continue to provide a challenge for the SDG decades. Care needs to be taken, however, in describing the performance of 'illiterate' populations. To position them as excluded and failing to participate in society is too simplistic. We have a lot to learn from those who have acquired their life knowledge outside of formal education systems. For development to be truly sustainable, their knowledge and skills need to be integrated into the dialogue with overarching international and national policies.

Finding funding for adult education, the poor quality of adult educators, and low retention rates for both educators and learners, are three critical challenges literacy takes forwards (Chisholm and Hasan, 2009). We also need to think more carefully about how the concepts of literacy as a continuum and not a simple binary opposite to illiteracy, and of formal education as part of a lifelong system, are handled in policy formulation. We need to pay attention to education not just in schools and institutions, but also outside these spaces. This report aims to open some discussions about how this might be possible, and to engage with some case studies that are taking an integrated and interlinking approach to literacy, gender equality and sustainable development.

Objectives

This report aims to provide an overview of the global state of girls' and women's literacy. Through a review of the literature, analysis of statistical information and case studies, it seeks to address the following key questions:

- What is the global state of girls' and women's literacy? What are some of the major achievements and issues still to be addressed? What are some major trends of girls' and women's literacy in the lifelong learning framework (SDG 4)?
- What are some key issues to be addressed in promoting girls and women's literacy as an integral part of the 2030 Agenda for Sustainable Development? How can progress in other SDGs help to create conducive environments for people to acquire, use and advance literacy skills?

The lack of progress in reducing the proportion of adult women who remain illiterate worldwide is driving change for literacy. This report outlines the key issues of women's and girls' literacy to date, then outlines the implications of these critical issues for the next fifteen years, and the goals and targets of the SDGs.

Global landscapes of girls' and women's literacy across the continuum: from birth to the end of life

Formal education systems and processes, literacy learning, and gendered norms and experiences are all located on a continuum. If systems work well, they can offer clear pathways for lifelong learning that is inclusive, gender-equitable and of good quality, and that diversifies as learners get older. If they do not work well, they can serve to marginalize key groups in myriad ways, including with respect to literacy skills.

At the start of the continuum, early childhood care and education (ECCE) is seen largely as preparation for primary school, whereas primary school is the key site for basic education, and junior secondary schooling, if the transition to it is made, is the stage at which skills and knowledge are developed and cemented. Although there has started to be some acknowledgement of the importance of junior secondary, not just primary, as a key to the basic education continuum and literacy learning, it is throughout secondary schooling that gendered norms become particularly relevant. Remaining in school from the ages of 10 to 19 years, the period when girls experience adolescence (UNICEF, 2011, p. 16), can offer a mechanism for social protection against early marriage and early pregnancy. Secondary and post-secondary schooling can also offer spaces for literacy to be deployed at its fullest, in creative and critically engaged ways that go beyond notions of functionality. Tertiary education in turn can normally only be obtained through successful transition from secondary school, and particularly by passing gatekeeping examinations. Assumptions about quality and equality in education and learning underpin this continuum.

To consider lifelong learning on a continuum thus demands paying attention to *all* the spaces and moments for learning – formal, non-formal and informal. It also requires consideration of the transitions between spaces, as well as access to them, and opportunities and experiences within them. Although primary education is conceptually 'universal' and standardized, as young people move through education and reach adolescence their life experiences and their skills start to diversify. Forms of educational provisions may also fragment at this point, as apprenticeships, technical and vocational training, and universities all become key centres of learning. This period of diversification, towards the end of the basic education cycle, is often where inequalities in education and learning are exposed, and girls and women are often the most excluded.

The following sections take a lifelong learning approach to the history of literacy learning and education across these different spaces, and recognize the importance of transitions between them.

Girls' literacy in the early years of life

The 2007 EFA *Global Monitoring Report* (GMR) (UNESCO, 2007) focused on ECCE, and emphasized the critical importance of early childhood experiences for all subsequent learning. Goal 1 of the EFA agenda aimed at 'expanding and improving early childhood care and education, especially for the most vulnerable and disadvantaged children'. This goal implied a multisectoral approach to early childhood, combining health, nutrition, social protection, education and learning experiences. The SDG framework aims to take forward and develop this integrated approach.

ECCE: 'Early childhood care and education supports children's survival, growth, development and learning – including health, nutrition and hygiene, and cognitive, social, physical and emotional development – from birth to entry into primary school in formal, informal and non-formal settings. Often provided by a mix of government institutions, non-governmental organizations, private providers, communities and families, ECCE represents a continuum of interconnected arrangements involving diverse actors: family, friends, neighbours; family day care for a group of children in a provider's home; centre-based programmes; classes/programmes in schools; and programmes for parents' (UNESCO, 2007, p. 15).

.....

ECCE should generate high returns on investment, offsetting disadvantage and inequality especially for children of poor families (UNESCO, 2007, p. 4). Young children's participation in ECCE should 'lead to a more equitable society', promote 'school readiness' and enable a better transition to primary school (UNESCO, 2007, p. 12). ECCE was not a goal within the MDG framework, but its influence on the achievement of other goals, especially poverty reduction, UPE and improved health, has been recognized (UNESCO, 2015, p. 47). SDG target 4.2 clarifies the formal educational component as pre-primary schooling, complementary to early childhood development and care, and promotes ECCE's importance specifically for primary school readiness.

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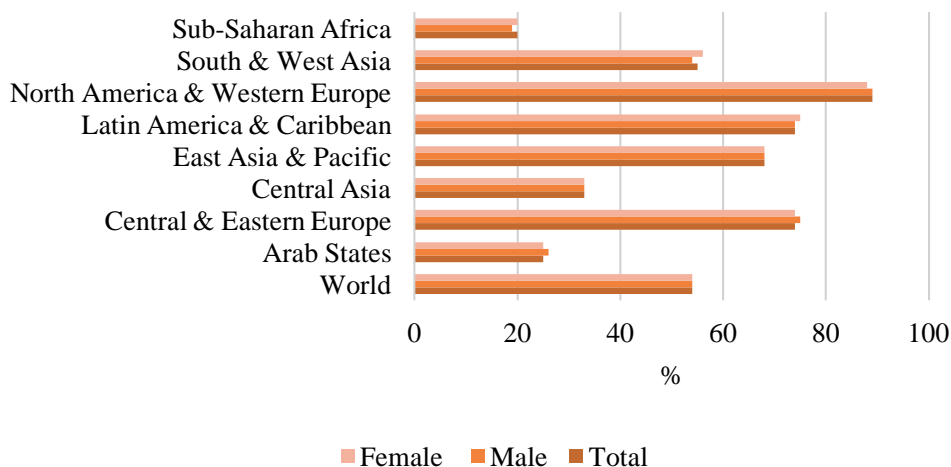
Early childhood is generally understood as the period of a child's life from birth to age 8, the age by which all children are expected to be in primary school (UNESCO, 2007, p. 14). Approaches to ECCE vary and are contested, but common aims – supporting the child's physical, emotional, social and cognitive development – cut across a wide range of interventions. Such interventions include a range of developmental activities, from parenting to community-based activities, to formal pre-primary education. Emergent literacy is embedded

in these activities and processes, including through early phonetics, exposure to books, alphabets, motor skills and more.

Pre-primary education is the term given to formalized early learning, usually for children aged 3 to 7 years (UNESCO, 2007, p. 20). Monitoring pre-primary enrolments has been one of the main ways in which progress towards ECCE has been measured since 2000. This has enabled a good view on the formal component of ‘education’ in ECCE, but this data does not capture the range of developmental activities noted above. In addition, the delivery of pre-primary education and its duration varies notably between and within countries.

Nevertheless, data indicates that enrolments in pre-primary schooling increased by two-thirds overall between 1999 and 2012. By 2014, forty countries, including Mexico, Ghana and Peru, had instituted compulsory pre-primary education. Projections indicate that by 2015, 47 per cent of countries with data should have pre-primary gross enrolment ratios (GERs) in excess of 80 per cent. Most of these countries are in Central and Eastern Europe, Latin America and the Caribbean, North America and Western Europe. A similar proportion of countries were expected to have low or very low GERs (below 69 per cent), and half of these are in sub-Saharan Africa (UNESCO, 2015, p. 63) (Figure 2). In 2012, the pre-primary GER for sub-Saharan Africa as a whole was just 20 per cent (and the GPI was 1.00). However, some countries in this region are proving exceptions. South Africa and Ghana, for example, are both making strong progress in pre-primary enrolments, with Ghana’s GER in 2012 standing at 116 per cent.

Figure 2 Pre-priary GERs by region and gender, 2012



Although EFA Goal 1 targeted disadvantage and vulnerability, but not gender as such, the data highlight gender parity in enrolments in much pre-primary schooling. By 2015, 70 per cent of countries had achieved gender parity in pre-primary enrolments, up from 55 per cent in 1999. In fact, enrolments at this level of education have the least pronounced gender disparities overall (UNESCO, 2015, p. 14). Despite a range of regional GERs at pre-primary level, all regions show broad gender parity (with GPIs from 0.98 to 1.02). By country, Ghana, which has made good progress in pre-primary education, has a GPI of 1.03, and India has a GPI of 1.05, both indicating that more girls than boys are enrolled at this level.

Measuring pre-primary enrolments provides insights into both the rates of access to early learning opportunities and the *effects* of early learning. Data indicate that improving children's readiness to learn through early interventions can reduce drop-outs and repetition, and increase achievement in the early primary school years and throughout education (UNESCO, 2015, p. 58). 'Expanding pre-primary access, whether through formal or informal programmes, is therefore vital for improving children's life chances, increasing the efficiency of the education system and resources, and reducing inequity in the broader society' (UNESCO, 2015, p. 58).

Given the data and the vital, foundational status of pre-primary schooling for future learning, gender disparities become particularly glaring as children move through the education system. What the GPI figures obscure are major disparities in access to pre-primary by wealth, residence, location and as a result of other forms of exclusion.

Informal and non-formal environments, including home, family and community-based learning, constitute just as much formative learning. Children's experiences before they begin school (that is, enter a formal educational environment) create the foundation for later learning (UNESCO, 2007). Children also require more than a formal pre-primary education before they start school. Parents have a strong role to play. The processes of emergent literacy and early child literacy emphasize the school *and* the family, home and community.

Literacy starts in the home. *Case study 1* highlights the important link between formal school environments, families and communities, and the critical role of parents. Parenting support is an area in which wide-ranging positive effects have been seen for both children and mothers (UNESCO, 2015, p. 53). Playing games with books can instil interest and enjoyment, and broaden vocabulary – key facets of the process of emergent literacy among young children. Developing literacy in their mother tongue as well as in other dominant languages may also offer a way to initiate children's pleasure and capability in literacy, as in *Case study 1*. Mother tongue literacy may, depending on context, be an important condition for quality emergent literacy acquisition.

Building bridges between the different spaces in which children develop and learn at an early age recognizes learning as lifelong, on a continuum, with cohesion between formal schooling and other developmental activities.



Case study 1:

Building bridges between school, communities and parents

'Use the picture of one of your parents or a group photograph to write your family history so that it can be told to your children.' That is one of the exercises done by mothers taking part with their children in the Family Literacy (FLY) project run in Hamburg, Germany. Launched in 2004 in several deprived districts by the State Institute for Teacher Training and School Development, this project is one of the winners of the 2010 UNESCO King Sejong Literacy Prize.

In Hamburg, where immigrants make up 14 per cent of the population, the FLY project is being implemented for parents from immigrant communities, mainly mothers, and their children below the age of 6. The first few years of life are crucial to the child's attitudes to learning and future approach to education. During that period parents play a key role in children's acquisition of literacy skills. It is a time when many of them make steps to learn or re-learn to read and write in order to help their children with their schoolwork.

For two years, mothers go to school once a week with their children. Some activities, such as games centred on books, are done together. In others, children and mothers are separated. The point is for participants not merely to learn to read and write, but also to become familiar with books, to stimulate pleasure in reading and to learn to write texts in German, in the parents' mother tongue or both.

Each year nearly 1,000 parents and children learn under the FLY project. The project has grown from nine to thirty-three districts, and each year twenty-five additional schools join. Down the years the project has successfully built bridges between schools, families and communities. It fosters communications between parents and teachers; many mothers develop improved self-esteem and confidence.

Sometimes the project uncovers talent. For example Ümmühan, a mother of Turkish origin, found she had a gift for writing. Her poems have been published and her collection is now used in literacy courses for immigrant women. Ümmühan says:

'My poems, notebooks and pencils are my best friends. They are always there for me, even when there's an emergency! Family Literacy is a great strategy to build a strong bond between mother and child. This will not only strengthen the mother's literacy skills, but provide opportunity to observe the child very closely and enjoy every step of the child's growth and development.'



Teaching mothers with their children fosters family literacy with intergenerational effects. This approach offers learning opportunities to both women and children. Reviews of EFA Goal 1 have found that 'many ECCE programmes provide carers with access to parenting education and other forms of support, which can improve adult learning and skills' (UNESCO, 2007, p. 17). This in turn has supported other EFA goals, and suggests a useful approach as we look forward to the SDG framings of lifelong learning. As reported in *Case study 1*, providing opportunities for children's and mothers' literacy can empower women beyond literacy learning, improving their confidence and self-esteem (Chisholm and Hasan, 2009). This may change traditional gender roles in the home and community, challenging gender discrimination and enabling women to become positive role models for their children, particularly their daughters, thus sustaining the benefits of the intervention. Thus, good-quality ECCE can empower women and generate gender-equal communities. As well as involving women, ECCE can free women to enter paid employment, pursue their education or their own goals. By providing ECCE to both boys and girls equally, in environments that challenge rather than entrench gender stereotypes, ECCE can also equalize learning and development from birth.

While approaches like FLY in Germany indicate excellent approaches to literacy in the early years of life, there remains significant inequality of opportunity to participate in ECCE-related programmes. The availability of interventions, their cost, relevance, the quality of care, teaching, pedagogy, curricula and culture all have an impact. The poorest rural families are most likely to be excluded, partly because they cannot afford the fees, although they are often the members of society who would benefit most (UNESCO, 2015, p. 63). While equitable access to early years care and education can reduce inequality in society, inequitable access can widen disparities, increasing the gap between the rich and the poor, the literate and the illiterate.

During the EFA period of 2000 to 2015, links between ECCE and literacy were not explicitly made in UNESCO's EFA monitoring reports: neither the 2006 nor the 2007 *Global Monitoring Reports* (GMRs), which focused on ECCE and literacy respectively, considered their mutual influence and effect. Yet as part of a renewed focus on children's 'readiness for primary education' underscored by SDG 4, target 4.2, the importance of attending to emergent literacy as part of a holistic multisectoral approach to the early years will become critical. The dialogue needs to be about more than access to pre-primary education. It should also consider opportunities and literate environments that are conducive to children's early learning and development.

Case study 2, from a literacy intervention in Egypt at the community development level, highlights the ways in which community-focused programmes can create virtuous circles, and a focus on families can spread through communities, shifting both skills and attitudes to gender equality, literacy and interlinking development processes. The case study also highlights that programmes that draw on culturally embedded beliefs such as a belief in the centrality of the family, rather than externally imposed values, can be particularly successful.



Case study 2:

Abu-Ashur, Egypt: where girls lead community development

If the family is the basic unit of society, then it makes sense for literacy programmes to target families. This is the reasoning behind the Egyptian Governorate of Ismailia's Females for Families literacy programme in the remote town of Abu-Ashur, which was awarded the 2010 UNESCO Confucius Prize for Literacy.

The Ismailia Governorate has a population of 1 million and a literacy rate of 78 per cent, which it wants to raise to 93 per cent in five years with the help of its partners and a group of girls from Abu-Ashur. None of the 4,000 families in Abu-Ashur earn more than US\$60 a month. Their main occupation is farming on land reclaimed from the desert. The 30,000 inhabitants suffer from inadequate health and education services; high illiteracy, ill health, early marriage and child labour are widespread.

The Governorate launched its development programme in Abu-Ashur with a participatory study covering everything from basic personal information to attitudes towards the education of girls. A database was developed and the data

analysed. 'We want to have a better life' was how people summed up their development goals: they hoped for higher income, improved life skills and more efficient services. It emerged that family, with its associations of trust and interaction, was the most significant word in the community. Family-based development was born.

Local families designated 120 girls for an intensive six-month training as development leaders. The training included literacy, health, human rights, income-generation and administrative and communication skills. After training, the girls returned to Abu-Ashur to work with family members on a customized basis. The girls established home literacy classes which addressed daily problems. They imparted information on health, hygiene and family planning, trained people in cooking, crafts or agriculture, accompanied them to the doctor or vet, encouraged children who had dropped out of school to return, and helped secure small loans. They became focal points for the administration, helping family members obtain identity cards, election cards and driving licences, as well as entitlements such as disability benefits.

This group of girls – one per ten families – was the pillar of the programme. There was also a permanent resource centre in the town staffed by a doctor, vet, education specialist, loan officer and other professionals. The Governorate held regular information meetings, built partnerships and financed micro-enterprises.

Females for Families is a social and cultural breakthrough which goes beyond reading and writing. Perhaps the most striking feature is that it has transformed local girls into leaders in their community and swept away prejudices about women in public life. As one learner remarked, 'Who would believe that those girls would manage to do this?'



The progress and state of girls' literacy

The second MDG along with EFA Goal 2 prioritized UPE, making it the most heavily supported and monitored education goal in the period from 2000 to 2015. MDG 2 aimed to ensure that by 2015, children everywhere, boys and girls alike, would be able to complete a full course of primary schooling, whereas EFA Goal 2 was to ensure that by the same date all children, particularly girls, children in difficult circumstances and those belonging to ethnic minorities, had access to, and completed, free and compulsory primary education of good quality. Thus the EFA goal went further, by stipulating target groups and the provision of free and compulsory quality schooling. In addition, MDG 3 and EFA Goal 5 both aimed towards the elimination of gender disparities in primary and secondary education, as a minimal target, with EFA Goal 5 going further, seeking gender equality in education by 2015, with a focus on access, achievement and quality in basic education. The EFA agenda recognizes gender parity as a necessary but not sufficient facet of gender equality (Aikman and Unterhalter, 2005; UNESCO, 2015, p. 155).

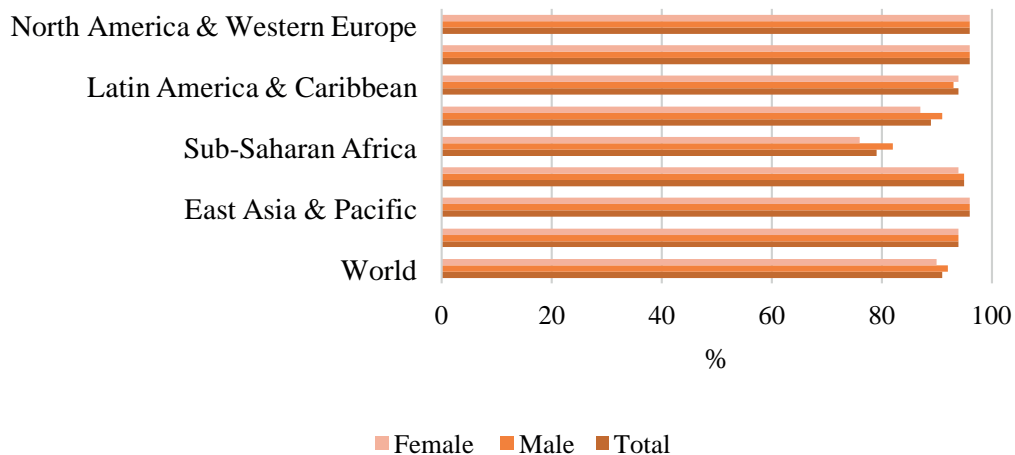
The UPE goal and efforts towards gender parity and equality in secondary schooling are central to assessing progress towards girls' literacy. The idea that 'all children should remain in school long enough to master the curriculum and acquire at least basic literacy and numeracy skills' is commonly based on a notion of functional literacy requiring the completion of at least seven years of formal schooling (UNESCO, 2006, p. 173). Programmes such as Room to Read (see *Case study 3*) aim to develop literacy skills within the formal environments of primary and secondary schooling, supporting access, encouraging literacy development in schools and assisting girls' completion of basic education. While functional literacy is necessary, it does not capture the range of literacy practices and outcomes engaged with in schools or communities, by young children or girls and boys of primary school age, as the case studies throughout this section indicate. But given that primary and secondary schooling is the setting in which functional literacy should generally be acquired, what progress has been made towards these goals since 2000, and what does this progress, or lack thereof, indicate about the current state of girls' literacy?

Progress towards gender parity in primary and secondary school enrolments is one of the big education success stories since 2000. The global adjusted primary net enrolment ratio increased from 84 per cent in 1999 to a projected 93 per cent in 2015. The global GPI was 0.97 for both levels of education in 2015. Nevertheless, as was noted in Section 1, progress has not been uniform across nations and groups, and aggregated global figures only tell part of the story. In sub-Saharan Africa the regional GPI in 2012 was 0.93 (*Figure 3*²). Although around two-thirds of countries achieved gender parity in primary enrolment by 2015, fewer than half of all countries, and none in sub-Saharan Africa, had achieved gender parity at *both* primary and secondary levels by 2015 (UNESCO, 2015, p. 155). Girls

2 The adjusted net enrolment rate (ANER) is the total number of pupils of the official primary school age who are enrolled at primary or secondary education levels, expressed as a percentage of the eligible official primary school-age population.

continue to comprise the majority of out-of-school children and young people: in 2015 31 million primary school-age girls and at least 32 million female adolescents were out of school worldwide (UNESCO, 2013b), and millions of them had never been enrolled in school.

Figure 3 Primary adjusted net enrolment ration by region and gender, 2012



In ‘countries with large populations of primary-age children who have never attended school, girls are still less likely than boys to never attend school, particularly among the poorest children’ (UNESCO, 2015, p. 158). For those girls who are enrolled, inadequate infrastructure, poor teaching and learning support, school fees and costs, and myriad context-specific manifestations of discrimination severely affect their attendance, progression and performance. Regional and country data thus mask wide variations between groups. Girls who are never enrolled or who drop out of school temporarily or permanently are among the most marginalized members of society, vulnerable to violence, early marriage and early pregnancy, in poor health, with poor economic prospects and lacking a range of literacy skills.

Although enrolments at lower secondary level have generally increased since 1999, access at this level remains dependent on wealth and residence, and has only become a focus of global pressure since around 2005. Poor girls living in rural areas are usually the last to obtain secondary schooling (UNESCO, 2015, p. 26). It is again in sub-Saharan Africa, and also in the Arab States, that gender disparities in basic education are particularly acute at the secondary level. At this stage of later adolescence, as we have noted, children’s experiences may start to diversify, and girls in particular become subject to gender norms which may be antipathetic to education. Thus, as pressure on girls and women to undertake ‘traditional’ gender roles and behaviours mounts with age, gender disparities in enrolments increase at

higher levels of education: 50 per cent of countries had achieved gender parity at lower secondary level in 2012 compared with 29 per cent at upper secondary and just 4 per cent at the tertiary level (UNESCO, 2015). The SDGs, as is shown in Section 3, lean towards addressing the fundamental barriers to girls' basic education associated with adolescence through targets for 'safe, non-violent, inclusive and effective learning environments for all' (target 4a) as well as targets under SDG 5.

At the same time, gender gaps in youth literacy, a 'foundation skill' in the EFA agenda, have narrowed. However, only 65 per cent of young females had basic literacy skills in 2015 (UIS, 2015, p. 3). This data should make us question the assumption that increased access to primary and secondary education will necessarily increase youth and adult literacy rates over time. This assumption ignores the salience of quality and equality in education, and not merely access. These factors have a huge bearing on educational attainment including literacy, especially for girls.

Enrolment rates thus tell only a partial, though useful, introductory story of the progress towards gender parity and equality in secondary schooling. They can also give partial indications of literacy skills, suggesting their likelihood but not confirming their presence. Analysis of attendance, completion and progression is also critical. These statistics indicate inadequate progress through education, especially for girls, signalling problems with what happens *in* school – with quality and equality (UNESCO, 2015, p. 83). The poorest girls, and those who enter primary school at over the target age, are especially vulnerable to premature school drop-out and low attainment. For the countries with data, in a quarter (most of which are in sub-Saharan Africa) at least 20 per cent of children are likely to drop out early (UNESCO, 2015). The skills, knowledge and attitudes learned in primary and secondary schooling often therefore do not map clearly against enrolment rates, which can only ever serve to initiate a dialogue about gender and literacy.

A quality education that cultivates literacy can enable girls to progress through school, not least because literacy and numeracy skills are essential for passing gatekeeping exams and for learning across the range of subjects and skills in education. Projects such as Room to Read, discussed in *Case study 3*, focus on a range of ways to support education of quality, which recognizes the salience of gender and literacy, particularly through libraries in deprived areas, the building of schools, support for girls in secondary education, and the publication of reading materials in local languages, with sensitivity to local histories and cultures.



Case study 3:

Room to Read: cultivating the habit of reading

'World change starts with educated children' is the credo of the Room to Read non-governmental organization (NGO). Working with local communities, partner organizations and governments, it develops literacy skills and the habit of reading among primary school children, and supports girls to complete secondary school and acquire the life skills they need to succeed in school and beyond. Its programme 'Promoting Gender Equality and Literacy through Local Language Publishing' was awarded the 2011 UNESCO Confucius Prize for Literacy.

Founded in 2000, based in San Francisco, United States and operating in nine countries (Bangladesh, Cambodia, India, Laos, Nepal, South Africa, Sri Lanka, Vietnam and Zambia), Room to Read has helped local communities to develop culturally relevant reading materials in local and minority languages. Its Local Language Publishing Programme has produced more than 500 new titles in twenty-five languages, of which more than 5 million copies have been distributed.

Room to Read runs four holistic, interlinked programmes. Reading Room has established 11,000 children's libraries in communities where poverty, ethnicity or other barriers put children at an educational disadvantage. School Room helps to build safe, child-friendly schools. The Girls' Education programme enables girls to pursue and complete a secondary education. Finally, the Local Language Publishing programme, the focus of the 2011 UNESCO Literacy Prize, ensures that children and teachers have access to a variety of reading materials so they can engage with books in an amusing and meaningful way.

The Room to Read publishing programme arose from the lack of children's books in local languages. It provides varied content at appropriate levels (from picture books to story cards to flip books) covering gender equality, the environment, health, art, beginning words and basic vocabulary, morals and values, family life, folktales, rhymes and poems. Today it publishes 5,000 to 10,000 copies of each new title, and distributes them to its network of schools, libraries and other organizations. One of the top publishers of local-language children's books in Nepal and Cambodia, its Nepal books have won the Children's Book of the Year award, and in Laos, the Laos Book Excellence awards in 2008 and 2009. Because the local-language books are printed and published in-country, costs are extremely low – approximately US\$1 per book.

All books are created in the country where they are designed to be used. Local writers and illustrators are selected to develop new culturally relevant material. Some stories are adapted from local folktales; others are sourced from writing competitions sponsored and facilitated by Room to Read, which promote literacy as a culture of writing and not just reading. National book development committees in each country, consisting of government officials, curriculum experts, authors, illustrators and Room to Read staff, serve as advisory boards to evaluate and select manuscripts. Books are often tested with local children, to elicit comments on plot, character, language and suitability for the target age group.

'Stories have a major role in human history,' says Ms Vasanthi Thayavaran, an author for Room to Read's Local Language Publishing programme in Sri Lanka. 'In my culture, grandmothers traditionally practised oral storytelling within the family, but times have changed. We now need to fill in that storytelling gap by giving children books which can be their companions forever. It is one of the happiest moments in your life, as an author, when you see books being read by the children you intended them for.'



Many other girls may be inside school buildings but not learning. Poor-quality learning environments curtail learning and generate a vicious cycle of under-achievement and exclusion for girls. Without literacy and numeracy skills, girls can fall behind in class, be forced to repeat grades, and drop out of schooling (UNESCO, 2013/4). The costs of schooling, distance to school, perceived or actual low-quality teaching and learning environments, and gender-based violence in schools can push girls out of school (UNESCO, 2015). At the same time, environmental and sociocultural norms and traditions, such as early marriage, early pregnancy and child labour, may pull girls out of school, especially if they are from poor, rural or marginalized communities.

Adolescence is a particularly challenging and contested time for young women, and often coincides with secondary schooling. At a time when young women may be pressured to drop out of school, to marry and/or become mothers, they are also on the cusp of acquiring a basic education that, if it is of good quality, can equip them with foundational and life skills including literacy and numeracy. The centrality of this stage for development has been noted in the SDG 4 targets, which move from focusing solely on UPE as in EFA and the MDGs, to free and universal primary *and* secondary schooling (SDG target 4.1). The more recent understanding of literacy within lifelong learning as not only functional but for creativity and critical engagement also heightens the criticality of quality secondary education for girls. During adolescence such critical skills and knowledge can help to effect positive change for girls, shaping their futures beyond normative expectations. Schools are critical spaces, and teachers are critical actors, in this process. Spaces for peer support, for example through girls' clubs, opportunities to engage with the curriculum, and occasions to develop 'soft' skills, are all essential at this stage of literacy learning.

For those girls who drop out of formal schooling, 'second chance' programmes and community provisions like those described at the ECCE level and included in the Room to Read initiative (*Case study 3*), which enable girls to access community libraries, local language publishing or women's literacy initiatives, may be critical in enabling the continuity of development of literacy.

Nevertheless, if girls are accessing resources intended for adult learning when they have not reached the age of maturity, this indicates that many adolescent girls, especially those who become mothers under the age of 18, fall through the support networks intended to help them acquire appropriate literacy and life skills. Those provisions that do exist may also reproduce gendered stereotypes in their approaches to learning, reinforcing girls' roles and traditional expectations. Additionally, to conceive of adolescent girls as adults is itself highly gendered, and may create problems in enabling them to learn relevant and appropriate skills. This is part of an emerging and wider engagement with girls' transitions to adulthood, and should be considered in approaches to literacy at this stage of life.

The diverse pathways that girls take in their education, including both formal schooling and other educational resources that they access during childhood, have a significant effect on their literacy, literacy development and likelihood of engaging with lifelong learning opportunities in adulthood. As Section 2.3 goes on to explore, the gendered nature of adult literacy reinforces the message that there remain significant challenges with girls' and women's literacy.



Case study 4: Education at the service of social development and peace

The Transformemos Foundation for Social Development in Colombia has provided close to 300,000 adolescents and adults with a range of educational opportunities through its Interactive System Transformemos Educando programme, which was awarded the 2012 UNESCO Confucius Prize for Literacy. Many of the learners, 65 per cent of whom are women, have now completed their elementary and secondary education.

Opportunities are provided for lifelong learning, including literacy for economic empowerment and for health, with a focus on preventive health, HIV/AIDS, nutrition and hygiene. Courses are offered at fourteen locations throughout Colombia, including remote rural areas and urban environments affected by violence and crime. Instruction is in Spanish and local languages, with six integrated instructional cycles that cover primary and secondary education. Using books, printed materials and interactive computer software, each nine-month cycle is designed to ensure that the specific cultural needs and aspirations of learners are taken into account.

The courses promote social development and students' participation in their communities. Topics addressed include literacy and gender, mother-child literacy and intergenerational

The progress and state of women's literacy

As the introduction highlighted, the global challenge of illiteracy is gendered. This picture has been drawn particularly through adult statistics, which have focused on the global population of adult illiterates. The intractable gender disparities in literacy rates have persisted: women have consistently made up two-thirds of the global illiterate population over the last two decades (UIS, 2015). Although all countries where fewer than 90 women for every 100 men were literate in 2000 have made progress towards parity, none of them were expected to reach parity by 2015 (UNESCO, 2015, p. 135). This can be contrasted with the progress made towards parity of enrolment rates for primary schooling. Gender parity in universal literacy rates remains a long way off.

We need to know not only how pervasive the phenomenon of low literacy rates among adults continues to be, but also why it persists, as well as what countries and international agencies are doing to take it seriously in their programming (UNESCO, 2015). Gender analysis is a key part of this understanding. That illiteracy is gendered, however, does not just mean that the ratios of male to female literacy favour men, and that the outcomes, as illiteracy rates, are not equal. It also suggests, as was discussed in Section 2.2, that the reason for this difference is that the gendered processes of education and acquiring literacy have not been equal. The higher proportion of women in the global illiterate population thus reflects two different, but simultaneous and related, processes. First, women were historically more likely than men to be denied education as children (and indeed across many groups and nations, this continues to be the case). The global movement towards UPE, with gender parity in enrolment, only really started to gain traction in the 1990s and into the millennium, and so women from cohorts who were past school age during these decades often missed out (Barakat, 2015). Second, there is still work to do before adult education programming is deemed successful in compensating for either a lack of, or the poor quality of, formal education in earlier years.

The lack of progress in both closing the gap between male to female illiteracy, and reducing the raw numbers of women who are illiterate, is thus also attributable to the insufficient support that has been given to women's literacy learning and non-formal education programmes over the last thirty years. The adult education field has worked hard to spell out the ways in which adult learning is different from (although it is on a continuum with) the ways in which children and adolescents learn, and that it thus requires different kinds of provision (Rogers and Horrocks, 2010). This provision has been lacking in most education planning and programming. Its absence can be attributed to four distinct but interrelated factors: political will, the effectiveness of programmes, the lack of attention to mother-tongue provision, and the influence of demand (UNESCO, 2015, pp. 144–5). Each of these factors is compounded, in different but related ways, by issues of gender inequality.

The neglect of adult education is partly to do with the prioritization of formal basic education, particularly UPE (Unterhalter, 2014). Countries such as Nepal, however, which has been unusual in that it has maintained improvement in women's literacy over three DHS survey waves from 2001 to 2011, suggest that with sustained investment and attention, it is possible

to teach literacy skills successfully to adult women. Nepal's 2008–12 National Literacy Campaign received UNESCO's Confucius Literacy Prize in 2010 for this work. Good-quality women's literacy programmes that are sustained over time, with prolonged political commitment, remain unusual in the global picture, however (Hanemann 2015a).

In addition to a lack of global political commitment and funding for adult learning, the quality of programming for adult literacy has been poor in both human and physical resources. Adult education and learning remains a non-priority for many countries, and often receives less than 3 per cent of education budgets (Chisholm and Hasan, 2009). 'Facilitators' of adult literacy programmes are often poorly trained and poorly paid; many work on short or medium-term contracts, and so their own learning is not sustained over time (Chisholm and Hasan, 2009). This affects pedagogy, which can be further hampered by the extent to which materials are sensitive to both gender and broader cultural contexts. Literacy programmes at the national level are too often delivered using a 'one size fits all' approach, which does not give space for the diversity of women's lives and their literacy preferences and practices (Chopra, 2011).

Adult learners themselves are also affected by the low status afforded to adult literacy and the adult literacy educators, as a stigma is attached to learners who are seen as 'illiterate'. The language of campaigns often carries negative messages, such as that illiteracy is a 'social illness' which can be 'eradicated'. This stigmatizes both illiteracy and those defined as illiterate, and leads to demotivation and reluctance to engage with literacy learning over time (UNESCO, 2015, p. 147). Adult women have high burdens of care, as well as financial responsibilities, and the range of demands on their time can mean that the opportunities for attending courses are slim (Eldred et al., 2014). This can be compounded by resistance to change in the status quo: that is, those organizing (and attending) literacy classes that aim to address gender equality or that explicitly target women have needed to be sensitive to male resistance to such changes (Robinson-Pant, 2014). These issues all affect the extent to which women in particular show demand, take-up and regular attendance at literacy classes, even when there are good-quality adult learning opportunities.

Looking forward to the rise of digital literacies through mobile phones, emerging bodies of literature argue for the usefulness of mobile technologies and the internet in providing innovative ways of teaching literacy, and offering distance learning opportunities for formal education (Lankshear and Knobel, 2008). They outline the ways in which this demand for technology might offer space to shift demands for literacy. Conversely, however, it might lead to further stratification, as the poorest and most vulnerable groups are excluded from both the new technologies and the opportunities they offer. Poor connections and limited availability of electricity are issues here. Both gender and poverty affect the ways in which technology is accessed, and mobile phones are used (Porter et al., 2010). These changes remain relatively new, however, and offer exciting spaces for development (Isaacs, 2012).

Working in mother-tongue rather than dominant languages might also offer a way to address the lack of progress in adult literacy. Courses conducted in local languages have more commonly been delivered by non-state rather than government actors,

and so have remained outside mainstream budgeting and planning. Countries such as South Africa, however, which have constitutional commitments to language rights, are notable exceptions in terms of their national commitment to deliver national mass literacy campaigns. South Africa's Kha Ri Gude Mass Literacy Campaign (2008–12), for example, was delivered in all eleven official languages, including for deaf and blind learners, and maintained high levels of informal assessment of literacy development for learners over the course of the programme (Hanemann, 2015a). For other countries such as Papua New Guinea, where 838 languages are spoken, the delivery of universal literacy has proved more challenging, and a lack of government engagement and investment has meant that there is still a long way to go (Robinson, 2015).

A final factor in the lack of progress on adult women's literacy is the effectiveness of programmes. Often literacy gains made by adults are not sustained over the long term. In addition to bringing attention to the quality and infrastructure issues connected with delivering learning, this has raised questions about the content of learning, and the subtle ways in which literacy programmes can alienate learners. It has been noted that not much has changed in how adult learning for women is designed and delivered (Eldred et al., 2014). All too often, the programmes appear to work to the premise that women themselves are the problem, rather than the structures that surround them. Externally imposed adult education programmes often do not take into account what women already know, and the ways in which literacies vary in different social contexts. Many female literacy programmes have focused narrowly on women's traditional gendered roles as women and carers, and have not afforded opportunities for women to learn and deploy literacy skills as political and social agents of change. Female illiteracy is seen simultaneously as a symptom, a cause, and a solution for social development, while programmes treat women as passive and 'third world' recipients, rather than active agents of change (Robinson-Pant, 2004). If adult education programming does not take account of what women already know, or indeed what they might want to know, this is likely to result in high rates of attrition and disengagement. All these factors can make top-down programmes inefficient and ineffective.

There have been some notable exceptions to this construction of women's literacy, however. Many women's literacy programmes have successfully been designed with the aim of empowering their users in some way. They are intended to go beyond rhetoric and mechanistic understandings of empowerment in solely economic terms, and instead challenge gender inequities with process-orientated models of empowerment that are locally owned (Robinson-Pant, 2014).



Case study 5: Training women at the heart of development in Algeria

The Literacy Training and Integration of Women (AFIF) programme, for which the Algerian Association for Literacy (IQRAA) was awarded the 2014 UNESCO Confucius Prize for Literacy, provides literacy training for women and enables them to obtain professional qualifications in trades such as computing, sewing and hairdressing. It helps them to become integrated into the workplace or to generate their own income with government support, such as microcredit or through employment offices. It has trained and empowered more than 23,000 young women aged 18 to 25, with the support of the Ministry of National Solidarity's social programme.

Soumya, 46, an embroiderer in Attatba, Wilaya de Tipaza, said:

'This association came to rescue us when we were cringing in fear. We had called ahead for them to open a literacy class, and this is how I first learned to read and write, and then how I learned to do embroidery on a machine.

'Our centre is a centre of reconciliation. It has allowed us to meet other people; to get to know each other and to share our daily worries, such as medical appointments, school

enrolment, and finding a job. It has especially helped us to build the peace we were aspiring to. Then, I enjoyed the benefits of microcredit given by the state, and I created my own studio. Today I live for my work, and four girls from the village are working with me. Isn't life grand?'

With the support of various partners, IQRAA maintains eight local Literacy Training and Integration of Women Centres. Through these centres, the programme adapts to the constraints of family situations, aiming to improve the living conditions of women. It also plays an advocacy role, improving understanding and management of social issues, such as health, hygiene, citizenship, peace, human rights, HIV/AIDS and environmental preservation.

IQRAA is an NGO founded in 1990, which aims to fight illiteracy, educational exclusion, dropping-out of education and poverty. It runs programmes for integration into the workplace and supporting isolated populations in rural areas. Since its foundation, the Association has contributed to literacy training for more than 1,680,000 citizens, mainly women. Every year 140,000 people who cannot read, write or count are enrolled, supervised by around 4,650 teachers and trainers remunerated within the framework of the National Literacy Strategy established by the government in 2007.

One of the ways in which we could start to reframe the debates around the 'effectiveness' of adult and women's literacy is therefore to think about different kinds of measurement of gains made by joining classes. It is essential that political will, and corresponding funding, addresses the deficit in adult education. The SDGs for perhaps the first time foreground adult learning, leading to an increased search for indicators that take into account not just literacy measurements on a continuum, but a fuller understanding of the place of literacy in men's and women's lives. As Section 3 shows, the SDG framework is underpinned by education in general and literacies in particular. This is a key moment for some of the historical neglect of adults and communities to be remedied. At this moment, however, we also need to move beyond models of illiterate populations as in 'deficit' (Aikman et al., 2016), and start to think more broadly of the range of literacies as they are situated in daily lives and local settings (Bartlett, 2008).

Girls' and women's literacy and the 2030 Agenda for Sustainable Development

As Section 2 has showed, progress has been made in both gender parity and equality in education, in inclusion, and in the quality of education. Notable progress has also been made in targeting women for literacy and empowerment programmes, although these have mostly been delivered using basic, compensatory models of literacy. However girls and women, particularly those from rural and poor contexts, continue to be the most likely to be excluded and subject to a range of inequalities. These issues come into keener focus during adolescence and adulthood. It is these persistent inequalities that the 2030 Agenda for Sustainable Development aims to continue to address, with four key areas of interest: access, gender, opportunities and outcomes. This renewed focus on equality, rather than parity, crucially broadens the focus from access to ??, and from individuals to communities.

There are three major dimensions to sustainable development: economic, social and environmental (Hanemann, 2015c). The SDG framework aims to address all three of these elements through seventeen goals that have an 'integrated and indivisible' approach to sustainability (United Nations, 2015). Education and lifelong learning, in both formal and informal structures, offers a powerful and proven vehicle to integrate these different but interrelated facets of sustainability. Literacy is one of the tools by which the knowledge and different skills needed to lead sustainable lives can be achieved (Hanemann, 2015c). Literacy skills can act as a catalyst which can both precipitate progress across the goals, and multiply their benefits in mutually reinforcing ways. This kind of joined-up thinking offers a key moment in the SDG framework to move forward in significant ways from the MDGs, which too often thought of development sectors in silos, and did not consider the links and relationships across them (Waage et al., 2010).

Girls' and women's literacy – a key for achieving SDG4

SDG 4 aims to 'ensure inclusive and equitable quality education and promote lifelong learning opportunities for all' (United Nations, 2015).



Literacy is a key tool in the process of inclusive and equitable quality education. The lifecycle continuum over the different levels of education includes primary and secondary schooling (SDG target 4.1), early childhood development (SDG target 4.2) and technical, vocational and tertiary education, including university (SDG target 4.3). Without literacy and numeracy skills, young and

adolescent girls can drop behind in, or out of formal education, particularly if they are from poor, rural or marginalized communities and subject to other forms of educational and social exclusion. Illiteracy, poor-quality education and social exclusion can create vicious cycles, in which inequalities are exacerbated and marginalized groups are denied both education and access to social goods. Conversely, literacy skills both emerging from, and allowing learners to take advantage of, good-quality education can create virtuous circles in which positive outcomes mutually reinforce each other. Literacy and numeracy skills are essential for passing gatekeeping exams, and for learning across a range of subjects and skills. Literacy is a key tool for supporting transitions from education to work and participation in broader social processes, although it is importantly only part of the picture (Eldred, 2013). It can thus act as a catalyst for an empowering education.

Literacy is also a key outcome of inclusive and equitable quality education. Literacy matters, particularly for girls and women, because we know that education and literacy skills increase the chances of getting good jobs, staying healthy, and participating fully in society, while the central role that women play in families and communities means that these benefits are sustained across generations. Certification and formal recognition of these skills can play a key role in accessing employment. Measuring literacy and numeracy in young people and adults (SDG target 4.6) provides a very good indication of whether education has been inclusive, equitable and of good quality, across and within nations. We can then see the groups that emerge from education without literacy skills as the end result of the kinds of process of exclusion which some groups experience. The disparities between both groups and nations represented by unequal literacy rates need to be eliminated (SDG target 4.5).

Finally, literacy is a key component of lifelong learning. Lifelong learning takes place both within and outside formal institutions. It is a process in which literacy, skills and knowledge are all outcomes on a continuum. This continuum includes technical and vocational skills, which are needed for employment, decent jobs and entrepreneurship (SDG target 4.4). It also includes the knowledge and skills needed to promote sustainable development, including human rights, cultures of peace and non-violence, global citizenship and the appreciation of culture (SDG target 4.7).

Lifelong learning thus encompasses literacy, skills, and forms of technical and vocational training and professional development. But it also encompasses ideas of active citizenship, a concept that gender cuts across, despite the absence of gendered analysis of it (Rogers, 2006). Citizenship gives a much fuller understanding of lifelong learning than the formal institutions and spaces of early childhood development centres, schools, colleges and universities. It demands that we think outside and across the box.

So how do we get there? As the targets for SDG 4 highlight, one key aspect of ensuring inclusive and equitable quality education is human and physical infrastructure. We need to build sensitive facilities that provide safe, non-violent, inclusive and effective learning environments for all (SDG target 4a), by substantially expanding the number of global scholarships (SDG target 4b), and also substantially increasing the supply of qualified teachers (SDG target 4c).

Reaching these three targets would be a great start. But we also need to address the environment outside formal education institutions in which lifelong learning continues. For girls and women to take advantage of conducive environments and opportunities for lifelong learning they need to be equipped with literacy, knowledge and skills. The reverse is also true: as they transition from education, conducive and gender-equitable environments in every aspect of their lives, including at work, in political spheres and at home, are central for girls and women to be able to use their literacy skills in equitable ways, and to take advantage of the opportunities offered for learning throughout their lives. It is the interaction between individuals, communities and their environments that forms the interrelated framework of the SDGs: both the individual and the environment matter for sustainable development.

Girls' and women's literacy – cutting across the SDGs

Literacy underpins progress towards the successful achievement of all of the SDGs. It is no coincidence that adult literacy programmes over the last few decades have set out to address at least two of the three dimensions of sustainable development, and many target women (Hanemann, 2015c). The process of learning literacy is not solely a technical one, but is often associated with the 'soft' and 'green' skills necessary for individual, community and global sustainable development (Robinson-Pant, 2014). Literacy, education and adult learning can all contribute to the realization of other rights, particularly for women and girls. The framing of education, literacy and lifelong learning in SDG 4 as foundational thus underpins the achievement of all the SDGs (Hanemann, 2015b).

Gender equality and the empowerment of all women and girls (SDG 5) also cuts across the SDGs. Gender equality and female empowerment have a multiplier effect. They are critical for women themselves, giving them the voice, agency and power to advocate change and to work as key participants in development. The central role that women play in families and communities further means that, along with individual benefits, the benefits from women's education are intergenerational and inherently sustainable.

In addition to the education and gender goals, four SDGs can be seen to flow directly from the MDG framework, and thus have the broadest evidence base to indicate ways in which literacy and gender equality can promote development. These are 'no poverty' (SDG 1), 'no hunger' (SDG 2), 'good health and well-being' (SDG 3), and 'decent work and economic growth' (SDG 8) (United Nations, 2015). *Figure 4* illustrates broadly some of what is already known from this existing evidence about the role that education and literacy can play in supporting progress towards these goals. All these goals are interlinked and mutually supporting. Decent work, for example, can lead to lower poverty, which in turn reduces hunger and can improve health and well-being; improved health can in turn lower poverty and increase productive employment. The individual girl, young and adult woman – and the diversity of female experience throughout the lifecycle – is at the centre of these goals and linkages.

Figure 4 Sources: OECD (2012, 2013), Eldred (2013), UNESCO (2013a, 2013/14, 2014, 2015), Montenegro and Patrinos (2014).



A number of the SDGs deal with the environment, including access to clean water and sanitation (SDG 6), renewable energy (SDG 7), life below water (SDG 14), and life on land (SDG 15). These goals take our focus beyond the individual, and into the interactions between individuals and the resources around them. Literate and more educated populations can enable better engagement with different environmental issues in the human and natural worlds, and support individuals and communities to take the urgent action required to combat climate change and its impacts (SDG 13). Education has been shown to be part of the solution to global environmental problems: higher levels of education lead to more concern about the environment, better adaptation to climate change effects, and better use of resources and recycling of waste (UNESCO, 2013a). This is particularly true for women; countries with high female education have been shown to withstand extreme weather events better than countries with equivalent income and weather conditions but not as high levels of female education (Laplante et al., 2010).

A further set of SDGs focus on the ways in which humans live together. These include the need for resilient and sustainable infrastructure and industrialization (SDG 9), sustainable cities and communities (SDG 11), and responsible consumption and production (SDG 12). Reducing illiteracy and inequalities within and among countries (SDG 10) is key to sustaining development within these spaces. Education has been shown to boost tolerance and support for democracy (UNESCO, 2013a). Transformative models of adult literacy can interact with and contribute to peace, justice and strong institutions (SDG 16), by opening space for

participants to analyse their situations, and reduce conflict and tensions, as well as addressing trauma and grief (McCaffery, 2005).

Literacy is also key for cementing links across the goals, which could be a key part of the achievement of SDG 17. Global partnerships require engagement with reporting and data, as well as ownership and buy-in from local communities. Illiterate and marginalized communities have too often been left out of the planning and consultations around these global processes.

Progress in the SDGs, progress in literacy: virtuous circles

Good-quality inclusive education, literacy skills and lifelong learning are key to progress across the SDG goals. The reverse is also true. Progress in the other SDGs, in terms of individuals, communities and societies, is essential for creating the kinds of conducive environment that allow girls and women to acquire, use and advance their literacy skills throughout their lives. Conducive environments, especially in terms of gender equality and female empowerment, are essential for full and productive participation in socio-economic spaces. Literate environments themselves will sustain demand for literacy, as increasingly technology and livelihoods diversify (Easton, 2014).

Many of the SDGs have targets that either explicitly or implicitly suggest a need for learning, training and awareness-raising, which can be understood as lifelong learning (Hanemann, 2015b; Rogers, 2016, citing discussion with Oxenham). These tend to make reference to knowledge, information and education, or the need for strengthening local participation, which suggests new forms of literacy and literate communities. These include, but are not limited to:

- **SDG target 2.3:** By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment;
- **SDG target 3.7:** By 2030, ensure universal access to sexual and reproductive healthcare services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes;
- **SDG target 6.b:** Support and strengthen the participation of local communities in improving water and sanitation management;
- **SDG target 8.6:** By 2020, substantially reduce the proportion of young people not in employment, education or training;

- **SDG target 9.c:** Significantly increase access to information and communications technology [ICT] and strive to provide universal and affordable access to the internet in least developed countries by 2020;
- **SDG target 12.8:** By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature.

Links can also be drawn without explicit mention to knowledge, information and awareness. SDG target 11.2, for example, calls for access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons. Improved transport systems would go a long way to ensuring safer access to educational opportunities, particularly for girls and women, who have been hampered by distant and/or unsafe journeys to and from school, as well as the gendered norms which argue that their bodies need to be protected (UNESCO, 2015).

These education targets across the SDGs suggest critical engagement at the individual and community level, and underscore the importance of education as involving critical reflection, participation and attitudes as well as skills and knowledge (Mauch, 2014). The list of SDGs does not offer a complete curriculum for adult learning and education, but when combined with other aspects of human development such as imagination and creativity, and human capability and agency for the pursuit of freedom, it does give us a good starting point (Sen, 1999; Nussbaum, 2006; Hanemann, 2015b).

Conclusions

There may be a danger that SDG 4 is treated as an 'education' goal, focusing on basic literacy for children and young people. We need to acknowledge an expansive definition of 'education' that reflects the many different spaces and ways in which people can learn, be taught, and 'educate' themselves and each other. Lifelong learning may be the key to this, but it cannot be seen as falling outside the responsibility of government. It is important to build on what people already know, in ways that are respectful of local cultures and local knowledge. Harnessing the potential of ICT and new technologies in inclusive ways, and expanding the focus of 'literacy' more fully across spaces, not only in schools but in technical and vocational centres, universities and workplaces, will also be critical (Hanemann, 2015b).

A holistic approach to the SDGs can thus take forward much of the good thinking and action around adult literacy. Historical efforts to improve adult literacy may have not been 'effective' according to the narrow framing of basic literacy skills, but they could be seen as extremely valuable once it is commonplace to employ an expanded notion of literacy and sustainable development that goes beyond function and binary understandings. Neither 'literacy' nor 'women' should be seen as a homogenous category; both gendered identities and literacy practices develop and shift over the lifecycle and according to contexts.

The final targets of SDG 17 suggest some ways to do this at the national and community levels: by enhancing capacity (17.18); by sharing knowledge, expertise and technology (17.16) as well as financial resources; and by enhancing capacity to increase the availability of high-quality, timely and reliable data (17.18). Strengthening the evidence base across the SDGs to include non-instrumental understandings of literacy, going beyond women-as-mothers, and focusing on girls and women as active agents of change, will be crucial to achieve positive, sustained change for women's and girls' literacy and sustainable development.

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