

EDUCATION SYSTEMS NEED A MAJOR RE-THINK



Aaron Benavot, Director of the Global Education Monitoring Report, examines the shortcomings of education systems, and points out that achievement of the Sustainable Development Goals in the Commonwealth is heavily dependant on a new approach to learning.

Going to school has always been seen as something that helps us acquire knowledge and skills for work; something that helps us earn a decent wage, and provide for ourselves and our families. But if education systems are designed with only economic purposes in mind then we are doing ourselves, our communities and our planet a disservice.

As we know, it is often the most educated nations that are coughing out the most carbon emissions. It is also no secret that elitist school systems in some contexts are contributing to inequalities. In addition, education systems often preserve one dominant language in schools, rather than recognising cultural and linguistic diversity. In doing so, they can dampen down the aspirations of ethnic or linguistic minorities, and inadvertently destroy traditional or indigenous knowledge systems. Textbook content can reinforce stereotypes and exacerbate ethnic tensions, resulting in intolerance, discrimination and political grievances. Combined with the knowledge that our planet is suffering the way it is largely due to individual and collective actions, these examples show education can undermine our collective ambitions. Clearly this is a time for rethinking its purposes, contents and design.

We must consider *what we are learning*

With the global population reaching 9.7 billion by 2050, for instance, crop yields need to increase by 70 per cent to keep up. Farmers need lessons to help them do this, just as they need new tools and knowledge to fight the effects of climate change.

The Global Education Monitoring Report

The need for those who create and amplify the blueprints of education systems to reconsider their designs is explored in the 2016 Global Education Monitoring (GEM) Report, *Education for people and planet: creating sustainable futures for all*, published by UNESCO, from which this article is taken (<http://gem-report-2016.unesco.org/en/home/>). The report explains that, with persistent inequalities, protracted conflict and natural disasters ever-present in our daily lives, the need for education systems to use their potential to influence attitudes, values and behaviour has never been so strong. Indeed, without a turnaround in the way we think about learning, the report shows that achieving our new global Sustainable Development Agenda will not be possible.

Initial analyses of farmer field schools have shown them contributing to increased crop yields by up to 12 per cent. Education planners must acknowledge this important link, and look harder at ways to continue education and training outside of school and into communities and for vulnerable populations.

Similarly, to create global citizens dedicated to finding solutions to environmental problems, schoolchildren need to have greater connection with nature, teachers need to be prepared to teach



about climate change and the environment, and teaching and learning materials should match those aims. Currently only around one-third of official curriculum frameworks around the world have a single reference to climate change and environmental sustainability, which could be quickly resolved.

Education planners and universities also need to urgently invest in green skills and relevant research for sustainable growth. The International Energy Agency, for instance, estimates that governments need to increase energy research and development by up to five-fold annually to achieve a quick transition to low carbon intensity. Financial planners should not be reducing their investments in sustainable agricultural research, as sub-Saharan Africa is worryingly doing, but increasing them, and fast.

We must analyse *the way that learning is taking place*

The right type of education – which encourages equality, democratic values, conflict resolution, collaboration and innovative thinking – also requires us to look harder at not just what, but the way that lessons are planned and taught. Are they teacher-centric or do they encourage constructive interactions between teachers and students? Do they invite different views to be aired, and debated, or enforce singular thought processes? Are teachers trained in being able to ask probing questions in class, even in conflict contexts? Our research from refugee camps in Dabaab and elsewhere show that they are not.

Never too late to learn

A lot of attention is spent on ensuring that the current generation is well educated, mastering relevant knowledge and skills to help us fix pressing global issues in the future. The importance of ensuring that today's youth acquire at least 12 years of good quality education goes without saying. But we need to think broader: climate change can't wait another 15 or 20 years for today's youngsters to graduate and become decision-makers. Crowded, overburdened and polluted cities can't wait decades for effective solutions. If we want to address our pressing environmental and societal problems, we need to start thinking about how to design an arc of learning and education as lifelong pursuits: beginning in infancy, and continuing throughout our adult lives.

It is understandable that most people do not know how large a challenge it is to broaden our thinking of education in this way. There is a gulf between the common belief of how educated adults are and the reality. But let's be clear: while education systems have expanded worldwide, millions have been left behind. Some never gained access to school; others began school but didn't finish; still others received an inadequate education of limited value. As a result, 758 million adults, two-thirds of whom are women, are unable to read or write a simple sentence. By one estimate two-thirds of adults today are not financially literate. And a further 263 million children and youth are out of school today, many of which will add to tomorrow's pool of adult illiterates if more is not done – and soon.

Do not be fooled into thinking this is a problem confined to developing countries. Even in Europe, pockets of low literacy abound: over half of adults in the EU are unable to do basic arithmetic in a spreadsheet. A third can't put an attachment on an email.

Given these staggering figures, it is shocking how little there is in place to give adults opportunities to learn. In low income countries, where adult illiteracy rates are the highest, the 2016 GEM Report shows that only 6 per cent have ever taken part in a literacy programme. In total, fewer than one in six countries spend more than 0.3 per cent of GDP on adult education. Although the case for helping adults to learn is strong, the issue falls low on country priority lists worldwide.

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Where learning should be happening

Apart from formal education, and above and beyond basic literacy programmes, learning should happen in many arenas. Most of us spend most of our waking hours in the workplace, for instance. Larger companies have a duty to encourage many forms of learning among their employees, especially in relation to environmental issues. Yet companies with green track records are still a rarity, rather than the norm, even if it's something their staff would welcome. A 2008 survey of global executives by the Economist Intelligence Unit showed that 40 per cent thought it important for their companies to align sustainability with their overall business. In addition, governments should find ways to encourage small and medium-sized enterprises address the changing education and training needs of their employees.

Likewise, efforts in communities to engage residents in new ways to keep the environment clean do exist, but are still an exception rather than the rule. This type of learning is important for teaching us all new sustainable ways of living. Listening to different points of view can challenge our beliefs and values, and help us consider new solutions to problems we might not have been aware of sitting isolated at our home. Coming up with solutions in collaboration also helps motivate us to carry them through.

One way of mobilising change in communities can happen through campaigns, whether run by NGOs like Avaaz, or Change.org, or by governments. These activities can help people learn about the importance

of taking up green practices, appropriate to different contexts. National sustainable consumption and production initiatives have been launched for this reason, for instance in the United Kingdom. Take one initiative in many countries including Nigeria, Tanzania and Uganda for instance, Lighting Africa, which campaigned for households to use safer energy in the form of alternatives to kerosene lamps. It had huge success, reaching 35 million people and helping households reduce carbon dioxide emissions by about 700,000 tonnes, the equivalent of getting 147,000 cars off the road.

If in doubt, remember why we're learning

The reasons for revising the way we think about learning are all around us. Perhaps one of the most convincing arguments can be found in the effects that education can have on life and death choices. The spread of education transforms societies by changing family preferences, social norms and cultural practices. This is central to the demographic transition of lower fertility and mortality levels that facilitate investment in children's health, nutrition and education. Education for All (EFA) policies implemented to 2015 accelerated fertility decline. For instance, Nigeria's universal primary education policy was estimated to have reduced early fertility by 0.26 births per year of increase in female attainment. Non-formal education programmes can help women plan childbirth too, as has been shown to work in countries as diverse as Pakistan and Australia.

The links between education and health might be self-evident. Think, however, about the agricultural sector, which is in urgent need of being rejuvenated. Not only is this sector the most directly affected by climate change and environmental degradation, but, according to various sources, the productivity of existing crop and pasture land needs to increase by 70 per cent to 100 per cent to feed our growing population in 2050. All this while many governments are halting their investment policies in agricultural research, even though investment is more than justified: the FAO estimates the returns to public spending on agricultural R&D in Uganda at more than 12 per cent.

Agricultural extension programmes can educate farmers about new technologies and practices, and thereby help improve crop yields, increase food security and reduce vulnerability to poverty. A study of farmer field schools, which currently reach over 12 million farmers in some 90 countries, showed that they increased yields by 12 per cent and farmers' net income by 19 per cent at the same time. To look at a country example, in Uganda, the likelihood that a family will adopt drought-resistant crop varieties increases when the father has basic education.

A second warning sign can be seen in the growing inequalities challenging liberalism and causing political upheavals worldwide. One culprit for the fact that prosperity is not benefiting everyone is that countries, and especially developing countries, are not ensuring that young men and women are equipped with relevant skills for work, leaving unemployment, working poverty and sluggish economies in their wake. By 2020, the world will have no fewer than 40 million too few workers with tertiary education relative to demand. In countries like Sierra Leone, Uganda, Malawi and Mozambique, for instance, less than 5 per cent of students have attained tertiary education. Aligning skills with labour market needs is becoming critical.

An important third test case can be found in the majority of sprawling urban masses, as seen in Mumbai or Karachi, swallowing up vast expanses of land and attracting huge swathes of people from rural areas. In these areas, if growth is singularly focused on creating knowledge-based urban economies, it will inevitably end up damaging or polluting our planet, and leaving masses of people behind. If education and city planners partnered together, on the other hand, it would reduce numbers in insecure informal employment and working poverty, and foster more inclusive economies. Likewise, education planners could answer the needs of urban planners and train well-prepared teachers who can serve in poor neighborhoods and reduce discriminatory attitudes toward particular urban student populations. In these ways progress in social inclusion can be realised.

Education purposes and contents in many countries are currently undermining our vision of sustainable

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development and a healthy planet. As Jeffrey Sachs, the economist, said in his foreword to the 2016 GEM Report, its findings should “set off alarm bells around the world.” As a key driver of change that is necessary if we're to achieve the vision of the 2030 Sustainable Development Agenda, we urgently need to rethink how we (re)design our education systems. We cannot afford for their potential to be squandered.

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The 2016 Global Education Monitoring Report, from which this article was drawn, was prepared by a team of researchers, including **Manos Antoninis, Nicole Bella, Nihan Koseleci Blanchy, Marcos Delprato, Catherine Jere, Priyadarshani Joshi, Katarzyna Kubacka, Alasdair McWilliam, Yuki Murakami, Taya Louise Owens, Will Smith, Rosa Vidarte** and **Asma Zubairi**.

The Global Education Monitoring (GEM) Report (<http://en.unesco.org/gem-report>) (formerly the Education for All Global Monitoring Report) is an editorially independent, authoritative and evidence-based annual report published by UNESCO. Its mandate is to monitor progress towards the education targets in the new Sustainable Development Agenda.