



# Innovating for quality

**Concept Note** 



#### Structure of the event

Webinar (Monday, 7 March)

Workshops (Tuesday, 8 March)

Symposium (Wednesday, 9 March & Thursday, 10 March)

Policy forum (Friday, 11 March)



In 2016 the world will embark on a new 15-year agenda for education. Countries have pledged to achieve 'inclusive and equitable quality education and lifelong learning for all'. This commitment forms a pillar of the broader Sustainable Development Goals (SDGs) that will guide international development through 2030.<sup>1</sup>

High-quality education lies at the heart of the new agenda and for good reason: Too many young people and adults are not reaching minimum learning standards, including millions of students enrolled in formal education. UNESCO estimates that one in five of the world's approximately 650 million primary school students cannot read basic sentences or solve simple arithmetic problems after at least four years of classes.<sup>2</sup> Research also indicates that learning stalls with troubling frequency not only in the early grades but at all levels of education.<sup>3</sup>

Quality deficits are particularly severe in low-income countries. Across parts of sub-Saharan Africa, large numbers of students who attend school do not attain functional literacy. But rich countries also need to improve the quality of learning, especially for economically disadvantaged students who often perform significantly below their wealthier peers.

Mobile technology, due to its growing power, affordability and ubiquity, offers a new tool to confront these challenges and help ensure all students receive the education and training needed to realize opportunities in knowledge economies and participate in society as global citizens. The internationally agreed Education 2030 Framework for Action specifically calls on countries to 'harness' information and communication technology (ICT) to 'promote quality and effective learning', <sup>4</sup> and the complementary Qingdao Declaration underscores that the application of mobile learning is 'essential' to achieving ambitious 2030 targets.<sup>5</sup>

Mobile Learning Week 2016 will seek to clarify the difficult question of how ICT can be used as an educational ally. The event will shed light on the ways mobile technology can be leveraged—in different contexts and for different groups—to provision and assure high-quality education for all learners now and in the future.



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## Learning from the past, planning for the future

A central lesson drawn from the 2000–2015 Education for All movement is that access and quality cannot be decoupled. Access without quality limits the value of education, and quality without access is inequitable and non-inclusive.

The new 2030 education agenda sets clear goals for literacy, numeracy and other skills. It reflects an understanding that school enrolment numbers are not, by themselves, indicators of progress, and seeks to establish more concrete signs of achievement such as improved and measurable proficiency in core subjects.

Today few people question whether mobile technology can expand the reach of education. In all corners of the planet mobile phones and tablet computers are making information more accessible, including educational content. What is less clear is the extent to which mobile technology can improve the quality of learning, especially vis-à-vis traditional and other non-technical approaches. A recent OECD report shows just how blurry this picture has become. The report found that over the past 10 years there has been no appreciable improvement in student achievement in reading, mathematics or science in countries that have invested heavily in ICT for education. Yet the promise that technology can meaningfully improve the quality of learning and, by extension, its outcomes is arguably as bright as it has ever been.

By facilitating knowledge-sharing between countries, organizations and individuals, Mobile Learning Week 2016 aims to highlight lessons learned from earlier roll-outs of educational technology to ensure that new investments in ICT meaningfully improve student learning.

## **Priorities for quality education**

The need for high-quality education is urgent for all learners, but it is especially needed 1) to support an influx of new students expected to enter education systems in the next decade and beyond; 2) to connect education and work in order to facilitate access to employment; 3) to empower lifelong learners and give adults as well as young people entry points to advance their education; and 4) to support women and girls who are often underserved educationally.

#### Quality education is needed FOR NEW LEARNERS

Importantly, the 2030 agenda specifies that all girls and boys should complete free and high-quality pre-primary, primary and secondary education. This is an ambitious departure from the previous 15-year agenda which insisted only on the completion of primary school. Guaranteeing that all children enrol in pre-primary school and finish secondary education will place immense demands on the education sector. Assuming all children attend primary and lower secondary school, the total number of students in school globally will increase by almost 14%, adding 124 million children to current enrolment numbers.

Changing demographics will place further pressures on education systems, especially in developing countries where youth populations are booming and educational capacity is already under strain. The United Nations estimates that 2 billion babies will be born in Africa in the next 35 years, and that the



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continent's under-18 population will jump by two-thirds, reaching 1 billion by mid-century. It is projected that nearly half of the world's population of children will be African before 2100.<sup>10</sup>

As millions of new students enter schools, particularly in poor countries, how can mobile technologies help establish and sustain high-quality learning opportunities for all?

## Quality education is needed TO CONNECT EDUCATION AND WORK

In many countries high unemployment, including for school graduates, has placed pressure on governments to create policies that better bridge education and work. McKinsey & Company estimate that by 2020 the world will have approximately 95 million more low-skilled workers than employers require, a shortage of 40 million workers with tertiary education, and an additional shortage of 45 million workers with at least secondary education. The implications of this are clear: to keep up with the increasing demand for high-skilled labour, education systems need to provide high-quality learning until at least—and preferably beyond—secondary school. Universities and other institutions, including technical and vocational training centres, are beginning to experiment with technology to reach larger numbers of learners, but additional innovations are required. Massive Open Online Courses (MOOCs) and other internet-based solutions rarely reach the people most in need of learning opportunities, and the educational quality of these solutions is often under scrutiny.

What mobile learning innovations and quality assurance measures will help tomorrow's workforce foster the creativity, knowledge and abilities required to thrive in dynamic knowledge economies?

## Quality education is needed TO EMPOWER LIFELONG LEARNERS

Educational systems need to innovate and leverage technology and other resources to support learning across life. Whereas the lines between schooling and work used to be well-defined and unidirectional, this boundary is now more fluid and multidirectional. Population ageing is taking place in nearly all countries on Earth. The United Nations estimates that globally the number of older persons (aged 60 years or over) will increase by 56% in the next 15 years, from 901 million people in 2015 to more than 1.4 billion in 2030. If these projections are correct, older persons will exceed the number of children (aged 0–9 years) for the first time in history by 2030 and outnumber adolescents and youth (aged 10–24 years) by 2050. Aging adults are likely to work until later in life than previous generations and will need opportunities to update their skills and reorient their professions due to technological changes and globalization. They will also look for new learning opportunities to continue to grow as lifelong learners and to engage in all types of cultural and social activities.

How can mobile technology help extend learning pathways and make them more flexible for learners of all ages, while simultaneously assuring educational relevance and quality?





#### Quality education is needed FOR WOMEN AND GIRLS

Education empowers women and girls. It provides them with the ability and knowledge needed to direct their own lives.

The positive ripple effect of education for girls is so far-reaching that it may be the single most effective tool for development.<sup>14</sup> Yet despite this, girls are less likely to have access to education than boys, and the educational opportunities available to girls are often of inferior quality.<sup>15</sup>

Males are far more likely than females to own and use ICT, giving them portals to good-quality information and education. In low-to-middle income countries a woman is 21% less likely to own a mobile phone than a man, and the divide is similar for internet access. <sup>16</sup> Nearly 25% fewer women than men have internet connectivity in developing countries, and this gap rises to nearly 50% in some parts of sub-Saharan Africa. <sup>17</sup>

How can countries use mobile technologies to provide better quality education to women and girls and simultaneously ensure they have the same access to ICT as men and boys?

# The promise of innovation in mobile learning

## MLW 2016 will allow innovators to share new ideas for supporting quality education with mobile technology.

Many of the factors that contribute to low-quality education—shortages of learning content, poorly designed courses, irrelevant curriculum, insufficiently trained teachers, inappropriate pedagogy, inefficient management, and limited oversight and accountability—are problems that can be addressed with innovative mobile learning solutions. Far from a theoretical possibility, mobile learning is improving the quality of education in tangible ways:

- Inexpensive smartphones and tablet computers provide a portal to a huge number of learning resources, many of them freely accessible.
- Many online courses are expertly organized, and internet-based educational content helps students establish foundational skills and then build upon them sequentially.
- Mobile learning opportunities can be accessed through a wide variety
  of devices already owned by individuals, including people living in
  communities that are underserved educationally.
- UNESCO and other organizations have leveraged mobile technology to build the capacities of insufficiently trained teachers and provide them with guidance to ensure the delivery of good-quality content.<sup>18</sup>
- Numerous ministries of education have used mobile devices to generate and retrieve detailed information about student enrolments, teacher numbers, and the conditions of individual schools and classrooms in order to make bureaucracies more responsive to local needs.<sup>19</sup>





- A number of public and private school networks have used mobile technology to reduce teacher absenteeism and make school leaders more accountable.<sup>20</sup>
- Mobile devices and applications are helping people with disabilities access high-quality learning opportunities, sometimes radically improving their educations.<sup>21</sup>

These solutions point to some of the ways technology is fostering innovation, opening new and improved pathways to high-quality learning and, in other instances, improving the provision of traditional education. MLW 2016 is intended to facilitate a flowering of ideas to help solve some of the world's most persistent educational challenges, quality foremost among them.

## MLW 2016 will examine how changed technological environments can boost the quality of learning.

A growing number of schools and even entire countries are making efforts to provide affordable mobile technology so that every learner can own or have access to an individual computing device. Placing powerful mobile technology in learners' hands and teaching them how to access dynamic educational materials enables new types of learning and helps support different learning trajectories and paces. Mobile technology matched with open educational resources (OERs) can narrow learning divides and improve the quality of education while driving down costs.

These trends are especially exciting because they have relevance in developed and developing countries alike. The infrastructural requirements of mobile technology are relatively light compared to other ICT solutions, and the prices of devices and connectivity are rapidly declining, making them increasingly accessible to the world's poor. Also, because mobile technology tends to be owned and controlled by individuals rather than institutions, it is uniquely positioned to facilitate anytime, anywhere learning.<sup>22</sup> Mobile devices are not usually tied to schools in the same way older ICTs have been; as such, their potential to advance self-directed learning and bridge in-school and out-of-school learning may be without precedent. This changed scenario may bring about transformations of decades-old teaching and learning paradigms and help reform the traditional organization of education.

MLW 2016 will document what this transformation may entail, examining its anticipated benefits as well as its risks. The event will also facilitate discussion about the conditions required to make 'one student to one device' learning scenarios successful.



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## MLW 2016 will explore ways in which governments can further promote innovation through technology.

In a relatively short period of time, mobile technology has helped catalyse innovation in the education sector, defying oft-repeated claims that teaching and learning are somehow immune to change. Indeed early evidence shows that major shifts are already underway, perhaps similar in scale and influence to the changes that have accompanied the embrace of technology in other fields, including commerce, finance and media. Ministries of education are increasingly using technology to personalize learning, differentiate instruction, fuel learning in contexts outside of classrooms, share resources, collaborate, streamline assessments, and 'flip' classrooms so that students learn content at home and then apply knowledge creatively in school.

More needs to be done to ensure these innovations benefit large numbers of learners, not just students participating in pilot tests. MLW 2016 will highlight ideas for bringing fresh methods to scale in order to ensure high-quality education for all learners, especially the most marginalized.

## MLW 2016 will examine the cost-benefit ratio of mobile technology for education.

Despite the considerable promise of MOOCs and other ICT solutions for education, evidence to demonstrate that these approaches meaningfully improve learning outcomes and represent good value for money remains far from settled. For example, while the uptake of MOOCs has been strong, the courses are expensive to produce and completion rates are typically under 15%. Similarly, a number of large initiatives to provision mobile technology to students on a one-to-one basis have been deemed failures: teachers were not prepared to use new devices for individualized learning approaches, school infrastructure could not support the technology, and school leaders were unclear what organizational and pedagogical adjustments were required. In this uncertain environment, many governments are understandably hesitant to move ahead with technology-based solutions for education. MLW 2016 will help participants deliberate how to balance innovation with practical considerations.

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#### **Event subthemes**

The overarching theme of Mobile Learning Week 2016 is 'innovating for quality'. The event will examine three interlinked subthemes to advance understandings about how mobile learning and related innovations can improve the quality of education:

## Subtheme 1: Making high-quality education a reality for all learners

Currently opportunities to receive quality education are unevenly distributed. Geography, class and gender are primary determinates. Mobile technology offers a vehicle to help bring high-quality learning to people who did not previously have access to it.

Questions that will anchor this subtheme include:

- What strategies can ensure that widely owned mobile devices facilitate the learning of **groups that are underserved** educationally, including economically disadvantaged families, women and girls, people with disabilities, and people living in rural areas? With humanitarian crises in the Middle East and Asia showing little signs of abating in the near future, how can mobile technology support the learning of refugees and others displaced by conflict, while also assisting their integration into new communities?
- What are the characteristics of high-quality mobile learning content? What models will prompt the production and wide dissemination of this **content**? How can mobile technologies accelerate the use and sharing of OERs and, simultaneously, better support speakers of minority languages?
- How can mobile learning improve **equity** in education? Technology-dependent learning platforms such as MOOCs have often helped students who are already succeeding academically, but they have been less effective in narrowing achievement gaps. What strategies can help ensure underachieving students are supported by mobile learning initiatives and given opportunities to catch up with higher-performing peers?

## Subtheme 2: Improving pedagogy and the relevance of learning

Many educators are not effectively trained to facilitate learning. Mobile technology can help support teachers and make instruction more effective. It can also enable new pedagogies that improve the quality and relevance of learning.

Questions that will anchor this subtheme include:

- How can mobile technology build the capacities of **teachers**, helping ensure they are able to provide high-quality instruction? What is the role and place of teachers in an era of smartphones and ubiquitous information? How is teacher professionalism preserved as technology continues to make deeper inroads in education?
- What pedagogies support learning with digital technologies? Many schools have experimented with 'bring your own device' policies in an effort to facilitate technology use in schools in a cost-effective way. Is this model pedagogically viable, and if so, what teaching



Mobile technology can help support teachers and make instruction more effective.



methods support the learning of students using different hardware and software? Some experts claim that technology distracts from the human conversations that lie at the heart of learning, and warn of impending over-reliance on technology in education and other spheres of life. What is the appropriate pedagogical balance of ICT-dependent and ICT-independent approaches to education?

• How can mobile devices personalize learning and improve assessment? ICTs can speed up feedback loops and help make learning more student-centric, but how has this been done in real-world settings and at scale? Some people have argued that due to the growing ubiquity of mobile devices, future assessments should allow, rather than prohibit, the use of internet-connected technology. What is the future of assessment in an era of seamless internet access?

#### Subtheme 3: Enhancing management, planning and evaluation

In addition to expanding access and improving teaching and learning, mobile technology can strengthen the administration, planning and evaluation of education systems. More powerful and targeted data collection and analysis capabilities should help educators design teaching strategies better adapted to learners' needs, making education more effective and flexible. As more and more student learning moves to digital devices, the back-end data will provide a wealth of information that researchers can mine to prompt innovative ideas.

Questions that will anchor this subtheme include:

- How can mobile technology improve education management and information systems? Information forms the backbone of sound educational plans and policies. What examples exist of mobile devices helping ministries of education and other actors measure the performance, efficiency, needs and shortcomings of learning systems in order to identify strengths and weaknesses and formulate prescriptions?
- Big data, cloud solutions and predictive analytics hold promise for education. How have they been used in real-world settings to improve the quality and efficiency of learning? For the past two decades, a number of technology firms have used data to make fine-grained and highly accurate predictions about consumer behaviour. Are there examples of large data caches helping educators anticipate the needs of schools, teachers and students? How has big data helped education specialists make sense of the causes and conditions of school performance, teacher impact and student growth? Finally, as data capture techniques become more encompassing, how will student privacy be protected and assured?
- How can mobile technology help solve some of the long-standing and system-wide problems that adversely impact the quality of education, particularly in developing countries? Teacher absenteeism remains high in many parts of the world and corruption siphons money away from its intended purposes. Where and how has mobile technology been deployed to mitigate these problems? Lastly, while technology can solve problems, it can also introduce new ones. What new challenges are likely to be confronted as mobile technology becomes more deeply embedded in education?





## Objectives and target audience

## MLW 2016 has four core objectives, aligned with the four events of the week:

- Clarify how and to what extent mobile technology can facilitate learning and strengthen the quality of education during an Education Fast Forward WEBINAR which will allow remote participants to take part in MLW and pose questions to expert speakers.
- Enhance the capacity of mobile learning practitioners through knowledge-sharing WORKSHOPS.
- Convene government representatives, education specialists, mobile learning experts, project managers, researchers and industry partners to share mobile learning innovations and strategies to improve the quality of education during a two-day SYMPOSIUM.
- Share ideas for promoting mobile learning and other technology-based innovations with successful policy interventions during a POLICY FORUM to be jointly organized with ITU.

## The audience and beneficiaries of MLW 2016 include:

- Ministry of education officials as well as representatives from ministries of ICT
- Researchers and practitioners in mobile learning
- Educators specializing in innovations and ICT
- Representatives of intergovernmental and non-governmental organizations promoting the use of technology in education
- Private-sector stakeholders, especially from technology fields and education publishers
- Civil society actors focusing on education
- University and school leaders
- Directors of teacher training institutions



### Structure of the event

#### Mobile Learning Week 2016 will consist of four events:

#### Webinar (Monday, 7 March)

UNESCO will partner with Education Fast Forward (EFF)<sup>24</sup> to host an online debate about the extent to which technology can further the quality of education and student learning.

The debate will examine the appropriate balance of new, technology-centric approaches to learning with the preservation of traditional educational practices, including face-to-face instruction. This can be a polarizing subject. On the one hand, the undeniable power of new digital devices, together with their ease of mobility and increasing prevalence even in low-resource settings, lends support to the idea that they are uniquely capable of transforming traditional learning paradigms. Around the world governments and other organizations are attempting to use smartphones and tablet computers to improve and accelerate education. Yet on the other hand, there remains a shortage of strong evidence to demonstrate that mobile technologies, despite their considerable promise, meaningfully improve learning outcomes and represents good value for money.<sup>25</sup> Many ICT in education experts are sceptical that powerful digital devices and always-on internet connectivity will facilitate significant gains in learning achievement; others fear that an over-reliance on personal technology—both in education and beyond it - may be diminishing people's capacity for empathy and distracting their attention from the face-to-face conversations that have historically formed the core of human relationships.<sup>26</sup> In this contested environment, should governments and schools move ahead with technologybased solutions for education, and if so, under what conditions?

The MLW 2016 webinar is a virtual-only event that can be joined in real time from any internet-connected location. The video debate format will allow online participants to comment, contribute, and answer and pose questions alongside an expert ICT in education panel. Details about the webinar, the exact start and end times, and instructions for how to join the online event will be shared in early 2016 on the MLW and EFF websites.



The workshops will allow participants to take part in detailed explanations and hands-on demonstrations of mobile learning content, technology, research and projects.

Mirroring the theme of MLW 2016, the workshops will highlight innovative solutions that leverage technology to improve the quality of learning, whether in isolation or as part of broader interventions. The central aim of the workshops is to build the capacities of a wide range of mobile learning practitioners through knowledge-sharing.

The event will feature a total of 12 workshops. Four workshops will be dedicated to each of the three MLW subthemes: 1) Making quality education a reality for all learners; 2) Improving pedagogy and the relevance of learning; and 3) Enhancing management, planning and evaluation. Each workshop will be 1.5



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hours in duration and held in a medium-sized room to encourage interactivity and discussion.

A call for workshop proposals will be open from late 2015 to early 2016.

#### Symposium (Wednesday, 9 March & Thursday, 10 March)

The two-day Symposium is the core of Mobile Learning Week 2016. The event will convene government representatives, education specialists, mobile learning experts, project managers, researchers and industry partners to examine mobile learning innovations and share strategies to improve the quality of education through the use of ICT.

The event will feature plenary panel discussions with experts and keynote presentations from thought-leaders in the field of ICT in education.

The programme will include approximately 40 breakout presentations, each lasting around 20 minutes. A call for presentation proposals will be open from late 2015 to early 2016 and will ask candidates to align their proposals with one of the three subthemes of the overarching event.

Overall, the Mobile Learning Week Symposium will seek to identify new innovations that leverage mobile technology to improve the quality of education in line with the United Nations Sustainable Development Agenda.

#### Policy forum (Friday, 11 March)

In line with the broad theme of MLW 2016, the Policy Forum will examine the role that policies can play in fostering innovation in the education sector and facilitating the use of mobile technology for learning.

The Forum will bring together ministers of education as well as ministers of ICT to discuss how newly affordable digital devices can help address urgent educational challenges and meet the needs of students, teachers and administrators. This event will also elaborate strategies to create synergies between national policies in the areas of technology, education, telecommunications and innovation. The Policy Forum will be jointly organized by UNESCO and ITU, the United Nations specialized agency for information and communication technologies, under the framework of the ITU m-Powering Development Initiative.





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