Dear readers,

Fifteen years ago 164 countries together with representatives from regional, international, non-government organizations, civil society and donor agencies assembled at the World Education Forum in Dakar, Senegal, and adopted the Framework for Action to guide the international community toward reaching the six Education for All goals. As this year marks the final year of the Education for All movement, we have witnessed much progress since April 2000, have learned many hard lessons, and are now taking stock of our achievements in order to better prepare for the post-2015 global education agenda.

In light of this historical movement, this newsletter issue is a special edition dedicated to the post-2015 development agenda and ICT's role in helping the international community achieve the newly set goals and vision for the future of education and development.

We hope you enjoy reading this edition!

Please let us know if you have any comments or suggestions.

Highlights:

- The Role of ICT in Achieving Lifelong Learning for All (by UNESCO Bangkok, ICT in Education)

This article provides an overview of the recent developments in international educational, such as the latest World Education Forum and the Qingdao Meeting, while also deconstructing the new more extensive education agenda and its relation to and hopes for ICT.

On 21 May 2015, Ministers of education, heads of development agencies, and representatives from civil society and private sectors, together with the other key stakeholders from more than 100 Member States gathered at the World Education Forum (WEF) in Incheon, Republic of Korea and marked yet another historic movement towards a new vision for education in development. Succeeding the Education for All movement that has contributed a great deal to placing education at the centre of the development agenda since 2000, the Incheon Declaration aims to achieve inclusive, equitable, quality education and life-long learning opportunities for all by 2030. This new education goal for development will be adjusted and adapted as one of the new Sustainable Development Goals (SDG) in UN Special Summit on Sustainable Development in September 2015 (New York) for the international community to follow and
implement until 2030. In this Declaration, the integration of ICT in education has, for the first time,
emerged as one of the key areas, recognized as an essential tool to enabling the fulfilment of the new
education goals.

Without any doubt, this new broader and more extensive education agenda cannot be achieved without
leveraging the full potential of ICT, especially in the quest of providing quality learning for everyone.
However, we also have to acknowledge the enormous and persisting gap between the impressive
potential of ICT and the actual less promising, often challenging reality, especially in the developing
contexts.

For example, in contrast to the long-held hopes for ICT to provide extended and flexible access to
education for difficult-to-reach areas, we are witnessing that populations who cannot afford to attend
school seldom have access to the technologies. Data shows that the highest dropout rates persist in the
least developed countries in South and West Asia (with 40% of children dropping out before the end of
primary education (UNESCO, 2015), thus creating hope for leveraging ICT to provide the drop-outs
better access to lifelong learning and quality education. Yet, if one looks at the fact that only less than
5% of households in these countries have Internet access at home (ITU, 2014), while virtually everyone
in the Republic of Korea and Singapore has access to the wired world (98% and 86% penetration,
respectively), we cannot help but be concerned about the worsening of the digital divide, and thus the
knowledge divide between the less and the more privileged. This is a conflicting effect of what ICT
innovation is desired to mediate and what the post-2015 education agenda pursues. For more
information on the status of each of the Asia Pacific sub-regions, please see the overarching overview
provided in this issue's Sub-Regional Corner.

Equipping these areas with the appropriate infrastructure and providing equal access to ICT for
everyone are important factors, but are not exhaustive in and of themselves. In order for ICT to play a
real role in achieving quality lifelong learning for all, knowledge and skills acquired through online and
open learning should be as legitimately and equally recognized as those acquired in more traditional and
formal settings. The equal credibility of online and flexible learning has yet to be widely accepted,
despite the massive expansion of online and open learning. For example, with the latest boom and
developments of MOOCs and learning through informal and non-formal education, such pathways and
tools are still very much undervalued when it comes to formal recognition, credibility or employability.
Well-organized online learning courses have the potential to add to the variety and quality of the
learning process and provide another opportunity towards tertiary education and lifelong learning. As
formal and non-formal learning are essentially two sides of the same educational coin, and as systematic
measures for OER/ODL quality assurance are as important as the recognition of learning through these
means, proper measures should be taken to ensure the quality of online courses and related assessment
procedures in order for them to be able to compete equally with the formal learning institutions.

Another notable gap is the pedagogical dearth that has not caught up to the current advancement of ICT
infrastructure. Most ICTs in schools are still utilized in ways that reinforce teacher-centred information
transmitting to the learners, rather than support new and innovative approaches to teaching 21st
century skills. This underlines the important argument of the urgent need for more quality teachers and
teacher training to match the new pedagogical structures and strategies necessary to effectively utilize
ICT infrastructure in learning environments. The reality is that teachers need more than just incremental
ICT training -- a comprehensive support system (e.g. quality preservice training, continuous inservice
training, incentives, leadership support, etc.) should be in place for teachers to be able to teach students
deep fundamental skills for the 21st century lifelong learning (i.e. critical thinking, creative thinking,
thinking interdisciplinarily, and communication/collaboration skills). The seven interwoven factors featured in Jerome Morrissey's article in this issue depicts the complexity of the eco system for the successful integration of ICT in a pedagogically innovative way.

More rigorous monitoring and evaluation is also necessary in order to realize ICT as a key enabler of equitable lifelong learning for all. A lack of such a mechanism may result in a supply-driven premature roll-out of ICT-based projects, which eventually leads to a waste of resources and further expansion of the digital divides. To help governments and schools make informed decisions on effectively using ICT, the current model of measuring infrastructure and related access is not enough. It is important to identify indicators to accurately measure all three factors, namely inputs (e.g. hardware, content), process (e.g. how they are being used) and outputs (e.g. learning outcomes and behavioural changes). This is not an easy task, and calls for multi-level stakeholder collaboration, including national governments, international organisations, private sector and NGOs.

In light of this, much needs to be done to highlight the vital role of ICTs in driving the 2030 education agenda. To this end, UNESCO, together with the Government of China, has held the International Conference on ICT and Post 2015 Education in Qingdao, People’s Republic of China, immediately after the WEF. The Conference was designed to collectively deliberate on potentials of ICT in underpinning the achievements of the 2030 education targets, including the issues identified above. Through the Qingdao Declaration, which was adopted by 518 delegates from 82 Member States upon the conclusion of the Conference, the high-level participants from multiple sectors made a commitment to explore the feasibility of three concrete activities to harness ICT for the 2030 education agenda:

1) seeking international funds to assist developing countries in using ICT to achieve their national goals in education;
2) building a global network of expertise on ICT in education to serve three user communities, namely policy makers, researchers and teachers; and
3) creating a clearing house on ICT-supported innovative practices in education. The full text of the Qingdao Declaration is available at: http://www.unesco.org/new/en/education/resources/in-focus-articles/qingdao-declaration/

To mark the historic milestone in the global education agenda, this month’s Newsletter is a special edition focused on ICT in the Post-2015 Development Agenda, featuring an expert article from Mr. Jerome Morrissey, Chief Executive Officer at Global e-Schools and Community Initiative, as well as a special analysis of Asia-Pacific ICT and Education Indicators in the Sub-Regional Corner. Programmes and projects section centers around the Qingdao Declaration priority areas, such as open educational resources, quality learning, big data, and more. Additionally, the ‘Cultivating a Community of Practice for Teacher Professional Development’ article features the importance of ICT-based communities of practice, describes ways they can be formed, providing an example of The Creating, Collaborating, and Computing in Mathematics project. News and events section features some of the latest UNESCO Bangkok events, such as the upcoming CASIE 2015 to take place in Bishkek, Kyrgyz Republic (July 7-9) on the theme of "Fostering an Enabling Environment for Teacher Innovation: From Policy to Practice". In Resources, readers can find information on open access journals or e-learning courseware, while new publications provide a few of the latest reads from international development organizations, such UNESCO and OECD.

Contact info: Jonghwi Park, j.park@unesco.org; Auken Tungatarova, a.tungatarova@unesco.org
Has ICT a Role in Educational Reform? (by Jerome Morrissey, Chief Executive Officer, GeSCI)

This article explores the potential of ICT in education, as well as its unique features in contributing to the achievement of the post-2015 goals and filling in the gaps of present shortcomings. This piece also finally presents the author’s 7 recommended considerations in holistically utilizing ICT in education.

Written by Jerome Morrissey, the CEO of GeSCI (Global e-Schools and Community Initiative) - an international organisation, founded by the UN, which provides leadership development at Government levels for coherent policy development and implementation for Knowledge Society development. GESCI currently works with 16 African governments, providing policy advice and carrying out project implementation in collaboration with ministries of education on whole school ICT integration. Previously, he was the founding director of the National Centre for Technology in Education in Ireland, responsible for the implementation of the Irish government’s ICT policy in Irish education. For several years he was vice-chairperson of the EUN Steering Committee of the European Union Schoolnet - a consortium of 28 Ministries of Education in Europe, created in 1997, to lead the way in bringing about change through the innovative use of new technology. He is a member of several International advisory councils on ICT integration in education.

Current education backdrop

Many emerging economies are stretched beyond their capacities to provide access to education for the majority of their youth. The sharp increases in primary school enrolments since 2000, as a result of efforts to fulfill Goal 2 of the Millennium Development Goals (MDGs), and Goals 1 and 2 of the Education for All (EFA) have resulted in enormous pressures being placed on current infrastructure and on human resources to educate a growing youth population.

Successes associated with both the Education for All (EFA) and the Universal Primary Completion (UPC) initiatives, in terms of access to basic education were explicitly recognized at the recent World Education Forum 2015 in Incheon, Republic of Korea. However, this very success has triggered a new focus on the quality challenge. Increasing enrollment rates have led to a general decline in the quality of education provision, as well as an accompanying and worrying shortage of teachers. The focus on access is still maintained but within a broader emphasis on equitable access and quality. UNESCO describes the learning crisis in terms of at least 250 million young people globally who cannot read or write even with four years of primary schooling. Of particular concern is the low and inadequate uptake of science, technology and mathematics subjects (STEM) at basic education levels, combined with inadequate examination results, which further reduce the number of school graduates capable of entering university or technological college to become quality technicians, engineers, researchers, programmers and technology innovators.

Can digital technology contribute to addressing some of these critical global education shortcomings?

The use of ICT is central to practice in most areas of professional life – for example, surgeons regularly conduct life-saving operations over the Internet from distant locations. Young people live their lives in a
digital world, and the Internet is their first destination for information and for social interaction. In general, the learning experience of young people can be enhanced and enriched through the appropriate use of technology and digital resources. If the learning process and the environment within which learning occurs reflect the ways these young people engage with technology outside of formal schooling, it would seem logical that learning would be a more engaging, interesting and intellectually stimulating experience. Evidence exists that access to high-quality online content not only enriches learning and helps to deliver curricular objectives, but also raises motivation levels, which can ultimately contribute to better student achievement.

**Past experience**

Over the past 25 years, European countries have invested several billion Euros with high expectations that this would lead to a holistic integration of ICT in their education systems. Technology companies talked enthusiastically about the *transformation* and *revolution* that education would experience if the right equipment and software were supplied to schools and if teachers were “trained” in how to use it. The world of industry and academia identified the higher order skills required if school graduates were to be productive and active citizens of the 21st century. However, change has been slow and more incremental than revolutionary. UNESCO’s “Education for All Global Monitoring Report, 2015” (Chapter 1. page 11) refers to the sluggish progress made in making infrastructure and technology available, and points to the absence of global coordination of ICT in Education. In retrospect, crucial and essential aspects, which would have facilitated greater ICT integration in schools, were overlooked. These omissions are dealt in the following set of considerations which are seen as necessary for thorough ICT integration in teaching and learning.

**Seven considerations associated with effective whole school ICT integration**

1 **Quality teachers with ICT proficiency:** By far the most important omission from national ICT policies has been the lack of recognition of the central role of the teacher. Teachers cannot be replaced by technology. If the provision of ICT devices does not take serious account of the teacher’s central role in the learning process, devices will have very limited impact on the achievement of learning objectives, and the resources will be wasted. A global consensus is emerging that the critical focus for effective ICT integration to take place in schools must be firmly placed on the provision of high-quality teacher ICT professional development. The recent Global Economic Forum’s report, “The Global Information Technology Report 2015” (Chapter. 1.7) argues that the best hope of improving ICT integration and educational outcomes lies in improving the capacities of teachers. Utilizing the UNESCO teacher ICT competency framework also usefully contributes to the overall professionalisation of teachers as a time when teaching standards and the morale of teachers are an all-time low. With the advent and proliferation of mobile devices, the ICT competencies of teachers must also include device management skills to enable the effective integration of student devices in the classroom.

2 **Technology as contributory:** While championing its use and effectiveness, GESCI discourages technology trends that focus on digital devices, which dictate the nature of interventions in education. We have witnessed too many failures of initiatives that were seduced by the glamour of technology without paying due need to the capacity and readiness of its teachers to integrate that technology in teaching and learning.

---

learning. Technology has limited impact on learning achievements outside the context of a school’s ICT strategy and ICT–competent teachers.

3 Committed school leadership: It is now clear that successful integration of ICT in schools demands confident and committed leadership. School readiness for ICT integration means that each school has a realistic and implementable ICT strategy, which identifies the current level of ICT infrastructure, its use and integration and presents a pathway for greater integration of existing and incoming ICT resources; the development of a positive e-learning culture in the school and a structured programme and support for ICT-based professional development of teachers. School ICT planning is an inclusive activity, involving representation from all teachers to encourage subsequent and sustained implementation. Principles of change management must be built in the process of whole school ICT integration. Strong, traditional institutional values, processes and outdated assessment reinforces their competitive and comparative concerns so that “experimentation” is resisted and the transformative effect of ICT is not availed of. These restraining factors must be overcome by the driving forces of school leadership, realistic whole school ICT plans and support for the professional development opportunities of teachers.

4 Relevant assessment: Throughout most of the world the nature and procedures of how we assess our students, and particularly what we assess are being scrutinised. Educationalists, employers and industry representative groups are questioning the relevance and limitations of our existing systems which place a huge emphasis on recall and transcription of fact and data at the expense of what have come to be known as higher-order skills - those of analysis, evaluation, judgement of relevance, creative response, team work and decision making. Therefore, If the very air around us is saturated with online-based information, why is assessment still largely based on memorisation and transcription? Assessment should be reformed and mostly confined to testing the higher order skills. Introducing radical changes to final examination and assessment is a notoriously difficult task with many vested interests in opposition. Understandably, university entrance demands a functional level of skills in language and in the STEM subjects. However, their selection practices rely wholly on a comprehensive range of final year graduating examination results of secondary school students. The backwash effect on secondary schools of this selection method has an overwhelming influence on curricular content and teaching methodologies and prevents radical reform of the way students are taught and assessment. Consequently, ICT is often deployed to make established practises more efficient rather than as a transformative agent in teaching and learning.

5 Availability of quality educational resources: The availability of relevant curricular materials and exemplary lesson plans are an essential support system to teachers. Teachers must be skilled to build, source and re-purpose relevant open source materials and other freely available online content, videos and simulations. Relevant, easily accessed learning resources, especially ones created by the teachers themselves, provide a strong incentive to use them. National/regional online repositories of resources for teaching and learning should be developed in conjunction with ministries of education and curriculum development institutions.

6 Minimum ICT infrastructure: Schools must ensure that a basics level of technology is put in place as well as access to the internet. Providing power and a reasonable level of ICT and internet services to schools is the function of inter-ministerial planning.

7 Sustainability of projects and evidence-based research: Innumerable pilot projects in ICT integration globally have taken place over the past 20 years. However, the vast majority have vanished like shooting
stars – bright and dazzling for a moment, but ending in frustration and unfulfilled promises. There is a requirement for more evidence-based and rigorous research, which is carried out over time and which emanates from longer-phased pilot projects. It is relatively easy to get successful outcomes from short-term and small-scale projects but well-structured projects, phased over a number of years, better lend themselves to research. Replicable innovative practice is often embedded in longer-term projects. The classroom and its interactions are chaotic places from a research perspective – certainly not a laboratory. There is also a greater chance of securing the collaboration of university research centres if the project extends over several years and has an attached research budget.

**Conclusion and Recommendations**

On the wider perspective, countries must refocus on revising and improving their education models and appreciate the central importance of education and skills development for future social cohesion, employment and wider knowledge society development. The Incheon Declaration, “**Education 2030: Towards inclusive and equitable quality education and lifelong learning for all**”, was approved during the World Education Forum 2015 in Incheon, Korea. As the **2030 Framework for Action**, it sets a comprehensive vision for education as we look towards 2030. Its focus rightly concurs with Sustainable Development Goal (SDG) 4 to “**ensure inclusive and equitable quality education and promote life-long learning opportunities for all**”.

Education, more than any other Government intervention, will shape countries’ futures, helping to ensure that resources are well managed, environmental integrity is restored, and digital knowledge and gender divides are narrowed. For example, one extra year of good schooling increases the annual economic growth of a country by 1%, making developing countries less aid dependent through better education. In this regard, the current and growing levels of global illiteracy and innumeracy urgently call for solutions which ICT can uniquely and creatively provide. The Qingdao Declaration, approved at the International Conference on ICT and Post 2015 Education, provides a complementary focus to the Incheon Declaration 2030 band and provides affirmation of the enormous potential of technology to assist in meeting the key feature of the new vision for education delineated therein.

Contact info: Jerome Morrissey, [Jerome.morrissey@gesci.org](mailto:Jerome.morrissey@gesci.org)

*Note: The opinions expressed in the articles included in this newsletter are those of the authors and editors and do not necessarily reflect the policies or views of UNESCO, nor of any particular Division or Office.*

**Sub-Regional Corner: Asia-Pacific ICT and Education Indicators**

*This article provides an overview of Asia-Pacific demographics, education challenges, successes, as well as key ICT indicators in the backdrop of the Education for All Goals and the post-2015 development agenda.*
Spanning across a vast geographical area, the Asia-Pacific region accounts for more than half of the global population (approximately 4.3 billion and forecasted to increase by about 1 billion by 2050), with six out of the world’s ten most populous economies as part of the region. The region is steeped in history and the 3500 languages spoken is reflective of its great cultural diversity. According to the United Nations’ World Youth Report 2013, the largest share of the world’s youth population (approximately 60%) hails from Asia-Pacific, therefore it is crucial to assess and review the progress the region has made with regards to the EFA goals in view of the fast-approaching 2015 deadline. The agenda has been acted upon by member states as we continue to see progress in education development in the region, and there has been a growing attention towards the concept of “lifelong learning” and improving access, equity and equality in education for all, regardless the level of education (from early childhood care and education to higher education and beyond) through formal, non-formal and informal methods (ADB, 2014; UNESCAP, 2014; UNESCO, 2014a).

Over the past decade, there has been reasonable improvement in the understanding of early childhood needs, which has consequently led to the region's progress in expanding early childhood care and education as reflected in the pre-primary gross enrolment ratios (GERs) – 24.69% to 32.88% in Central Asia, 42.50% to 67.80% in East Asia and the Pacific, and 30.17% to 54.91% in South and West Asia (Table 1). Strategies to greater expansion include passing laws to mandate participation, abolishing of fees, financial incentives and public awareness campaigns to appeal to parents and children. However, rising enrolment has come at the cost of considerable inequality between urban and rural areas as well as wealth inequalities in attendance, while the quality of pre-primary education is yet to be addressed. The relatively low GER in Central Asia is also a cause for concern as it falls below the world’s average of approximately 50% (UNESCO, 2015).

It is also evident that there has been significant progress made towards achieving universal primary education and gender equality in the region – primary GERs have been increasing over time with values in all sub-regions either approximating or already at 100%, and many countries have also attained gender parity as measured by the gender parity index (GPI). The GPI is an indicator that is commonly used to assess gender differences through the computation of the ratio of female-to-male values, and gender parity is reached when GPI is between 0.97 and 1.03. However, despite the positive enrolment situation in the region, large numbers of children still remain out of school due to a variety of reasons from religious strife to political leadership. In most low income countries, primary completion remains a challenge with high dropout rates. For example, in the sub-region of South and West Asia, almost 40% of children do not complete the full cycle of primary education (UNESCO, 2014b, 2015).

The poor quality of education persists as a challenge in the region, denying children and youth of better opportunities. As highlighted above, the region has made significant gains in access to education, but progress in quality of education has been slow. More emphasis should be placed on quality and learning and this would likely reflect in the post-2015 framework. One of the indicators for quality of education is the pupil-teacher ratio, which has seen considerable improvement over
the past decade, especially in primary education in the region – from 20 students to a teacher to 16.1 in Central Asia, from 22 students to 19.1 in East Asia and the Pacific, and from 39.8 students to 35.2 in South and West Asia (Table 3). However, increasing the number of teachers does not necessarily mean an increase in the quality of teaching. Teachers have to be well-trained and motivated, and many countries have expanded teacher numbers rapidly by hiring people without the appropriate qualifications. Due to the increase in enrolment rates, countries are also responding to the shortage of teachers through the use of contract teachers of which its effectiveness is debatable. Suggested steps to take from here include conceptualising of effective strategies to assess and monitor progress in learning outcomes, widening the use of appropriate teaching and learning materials, developing relevant curriculum and deploying technology to support learning (UNESCO, 2015).

High literacy rates (youth and adult) in all sub-regions except South and West Asia have been reported (Table 2). Despite this, the region is reported to have the highest number of illiterate adults (64%, only reduced by 4% in the past decade). In measuring youth literacy, it is important to consider the participation rate of secondary education, as children would acquire foundation skills in literacy and numeracy required for decent work with salaries that would allow them to meet daily needs. There has been an increase in secondary GERs in all sub-regions, but South and West Asia remains a concern as its GER (63.92%) is reportedly below the world’s average (approximately 82%). The legislation of free secondary education and abolition of school fees have contributed to the increased secondary enrolments. However, the proliferation of access to secondary education has not helped to remedy the problem of inequality, as secondary education is usually obtained first by advantaged groups and only later by the marginalised. Some of the contributing factors include youth having to combine work with schooling or prioritising work over education. Therefore, to improve both youth and adult literacy skills, countries in the region have been promoting education alternatives for those who are no longer in school, for example, non-formal programmes, vocational courses and life enrichment programmes (UNESCO, 2015).
Table 1: Gross enrolment ratios and gender parity index

<table>
<thead>
<tr>
<th>Gross enrolment ratio (%)</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-primary, Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>East Asia and the Pacific</td>
<td>42.50</td>
<td>44.81</td>
<td>47.32</td>
<td>49.38</td>
<td>51.97</td>
<td>53.53</td>
<td>55.35</td>
<td>57.55</td>
<td>61.53</td>
<td>67.80</td>
</tr>
<tr>
<td>South and West Asia</td>
<td>30.17</td>
<td>31.74</td>
<td>36.42</td>
<td>38.65</td>
<td>45.19</td>
<td>50.97</td>
<td>50.48</td>
<td>51.93</td>
<td>54.95</td>
<td>54.91</td>
</tr>
<tr>
<td><strong>Primary, Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central Asia</td>
<td>98.72</td>
<td>99.00</td>
<td>98.40</td>
<td>98.19</td>
<td>98.48</td>
<td>98.53</td>
<td>98.98</td>
<td>99.13</td>
<td>99.40</td>
<td></td>
</tr>
<tr>
<td>East Asia and the Pacific</td>
<td>109.05</td>
<td>110.33</td>
<td>111.41</td>
<td>114.88</td>
<td>116.78</td>
<td>117.72</td>
<td>117.60</td>
<td>117.05</td>
<td>117.14</td>
<td></td>
</tr>
<tr>
<td>South and West Asia</td>
<td>100.65</td>
<td>103.11</td>
<td>105.10</td>
<td>106.88</td>
<td>109.07</td>
<td>109.76</td>
<td>109.69</td>
<td>110.26</td>
<td>110.25</td>
<td>110.44</td>
</tr>
<tr>
<td><strong>Secondary, Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central Asia</td>
<td>92.17</td>
<td>93.08</td>
<td>94.54</td>
<td>95.11</td>
<td>95.90</td>
<td>95.36</td>
<td>96.45</td>
<td>96.95</td>
<td>97.96</td>
<td>98.57</td>
</tr>
<tr>
<td>East Asia and the Pacific</td>
<td>62.95</td>
<td>64.66</td>
<td>65.94</td>
<td>68.02</td>
<td>71.81</td>
<td>74.47</td>
<td>77.64</td>
<td>80.39</td>
<td>82.89</td>
<td>84.47</td>
</tr>
<tr>
<td>South and West Asia</td>
<td>48.65</td>
<td>49.80</td>
<td>51.59</td>
<td>53.04</td>
<td>55.07</td>
<td>57.55</td>
<td>57.56</td>
<td>60.53</td>
<td>63.27</td>
<td>63.92</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gross enrolment ratio/Gender parity index (GPI)</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-primary</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central Asia</td>
<td>0.97</td>
<td>1.00</td>
<td>0.99</td>
<td>0.99</td>
<td>0.99</td>
<td>1.02</td>
<td>1.01</td>
<td>1.01</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>East Asia and the Pacific</td>
<td>0.98</td>
<td>0.98</td>
<td>0.97</td>
<td>0.97</td>
<td>0.96</td>
<td>0.97</td>
<td>0.98</td>
<td>0.98</td>
<td>0.98</td>
<td>1.00</td>
</tr>
<tr>
<td>South and West Asia</td>
<td>1.02</td>
<td>1.01</td>
<td>1.03</td>
<td>1.03</td>
<td>1.02</td>
<td>1.02</td>
<td>1.01</td>
<td>1.03</td>
<td>1.02</td>
<td>1.02</td>
</tr>
<tr>
<td><strong>Primary</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central Asia</td>
<td>0.98</td>
<td>0.98</td>
<td>0.98</td>
<td>0.98</td>
<td>0.98</td>
<td>0.99</td>
<td>0.99</td>
<td>0.99</td>
<td>0.98</td>
<td>0.99</td>
</tr>
<tr>
<td>East Asia and the Pacific</td>
<td>0.99</td>
<td>0.99</td>
<td>0.99</td>
<td>0.99</td>
<td>0.99</td>
<td>0.98</td>
<td>0.99</td>
<td>0.99</td>
<td>0.99</td>
<td>0.99</td>
</tr>
<tr>
<td>South and West Asia</td>
<td>0.94</td>
<td>0.93</td>
<td>0.95</td>
<td>0.95</td>
<td>0.96</td>
<td>0.98</td>
<td>0.99</td>
<td>0.99</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td><strong>Secondary</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central Asia</td>
<td>0.97</td>
<td>0.96</td>
<td>0.97</td>
<td>0.97</td>
<td>0.97</td>
<td>0.98</td>
<td>0.99</td>
<td>0.98</td>
<td>0.97</td>
<td>0.98</td>
</tr>
<tr>
<td>East Asia and the Pacific</td>
<td>0.97</td>
<td>0.98</td>
<td>0.99</td>
<td>1.00</td>
<td>1.01</td>
<td>1.01</td>
<td>1.02</td>
<td>1.00</td>
<td>1.01</td>
<td>1.01</td>
</tr>
<tr>
<td>South and West Asia</td>
<td>0.84</td>
<td>0.83</td>
<td>0.85</td>
<td>0.85</td>
<td>0.87</td>
<td>0.89</td>
<td>0.92</td>
<td>0.92</td>
<td>0.94</td>
<td>0.93</td>
</tr>
</tbody>
</table>

### Table 2: Literacy rate

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Youth, Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>East Asia and the Pacific</td>
<td>98.01</td>
<td>98.01</td>
<td>98.87</td>
<td>98.87</td>
<td>98.87</td>
<td>98.87</td>
<td>98.87</td>
<td>98.87</td>
<td>98.87</td>
<td>98.87</td>
</tr>
<tr>
<td>South and West Asia</td>
<td>73.81</td>
<td>73.81</td>
<td>80.15</td>
<td>80.15</td>
<td>80.15</td>
<td>80.15</td>
<td>80.15</td>
<td>80.15</td>
<td>80.15</td>
<td>80.15</td>
</tr>
<tr>
<td><strong>Adult, Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central Asia</td>
<td>99.00</td>
<td>99.00</td>
<td>99.56</td>
<td>99.56</td>
<td>99.56</td>
<td>99.56</td>
<td>99.56</td>
<td>99.56</td>
<td>99.56</td>
<td>99.56</td>
</tr>
<tr>
<td>East Asia and the Pacific</td>
<td>91.60</td>
<td>91.60</td>
<td>94.92</td>
<td>94.92</td>
<td>94.92</td>
<td>94.92</td>
<td>94.92</td>
<td>94.92</td>
<td>94.92</td>
<td>94.92</td>
</tr>
<tr>
<td>South and West Asia</td>
<td>58.95</td>
<td>58.95</td>
<td>62.57</td>
<td>62.57</td>
<td>62.57</td>
<td>62.57</td>
<td>62.57</td>
<td>62.57</td>
<td>62.57</td>
<td>62.57</td>
</tr>
</tbody>
</table>


### Table 3: Pupil-teacher ratio

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-primary</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central Asia</td>
<td>10.9</td>
<td>10.6</td>
<td>10.6</td>
<td>10.8</td>
<td>10.9</td>
<td>10.8</td>
<td>10.6</td>
<td>10.5</td>
<td>10.8</td>
<td>10.8</td>
</tr>
<tr>
<td>East Asia and the Pacific</td>
<td>23.0</td>
<td>23.0</td>
<td>22.8</td>
<td>22.3</td>
<td>21.5</td>
<td>20.8</td>
<td>21.1</td>
<td>21.2</td>
<td>20.9</td>
<td>22.1</td>
</tr>
<tr>
<td>South and West Asia</td>
<td>35.7</td>
<td>36.0</td>
<td>37.2</td>
<td>35.9</td>
<td>36.0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Primary</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central Asia</td>
<td>20.0</td>
<td>19.1</td>
<td>18.7</td>
<td>18.1</td>
<td>17.2</td>
<td>16.8</td>
<td>16.7</td>
<td>16.9</td>
<td>16.1</td>
<td>16.1</td>
</tr>
<tr>
<td>East Asia and the Pacific</td>
<td>22.0</td>
<td>21.1</td>
<td>20.2</td>
<td>19.8</td>
<td>19.2</td>
<td>18.8</td>
<td>18.3</td>
<td>17.9</td>
<td>17.8</td>
<td>19.1</td>
</tr>
<tr>
<td>South and West Asia</td>
<td>39.8</td>
<td>39.8</td>
<td>39.6</td>
<td>39.5</td>
<td>39.3</td>
<td>38.3</td>
<td>37.3</td>
<td>36.3</td>
<td>35.1</td>
<td>35.2</td>
</tr>
<tr>
<td><strong>Secondary</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central Asia</td>
<td>13.0</td>
<td>12.9</td>
<td>12.9</td>
<td>12.7</td>
<td>12.5</td>
<td>12.2</td>
<td>11.9</td>
<td>12.2</td>
<td>12.1</td>
<td>12.0</td>
</tr>
<tr>
<td>East Asia and the Pacific</td>
<td>18.4</td>
<td>18.3</td>
<td>17.9</td>
<td>17.3</td>
<td>16.6</td>
<td>16.2</td>
<td>16.0</td>
<td>15.8</td>
<td>15.9</td>
<td>15.7</td>
</tr>
<tr>
<td>South and West Asia</td>
<td>30.6</td>
<td>30.5</td>
<td>28.9</td>
<td>27.9</td>
<td>26.8</td>
<td>25.9</td>
<td>24.8</td>
<td>24.8</td>
<td>25.3</td>
<td>25.3</td>
</tr>
</tbody>
</table>

Given the high levels of investment in national technological infrastructure of the countries in Asia Pacific, some countries have already reached or outperformed international standards of ICT-assisted instruction while in other countries much progress remains to be made. The varying stages of ICT development throughout the region reflects the disparity in economic development of the countries. On the one hand, the top of the regional ranking (and also the top of the global ranking) is occupied by ICT champions like the Republic of Korea, Singapore, Japan, Australia and New Zealand with IDI\textsuperscript{2} values that exceed that of the developed-country average of 7.20. On the other hand, there are several countries that fall below the developing-country average of 3.84 and are mostly countries that make up the region’s low-cost countries. This regional divide is more apparent when comparing ICT connectivity of households throughout the region – while less than 5% of households in Afghanistan, Bangladesh, Lao PDR, Myanmar, Nepal and Solomon Islands have Internet access at home, virtually all households in the Republic of Korea (98%), Japan and in Singapore (86%) enjoy this facility (ITU, 2014; UNESCO-UIS, 2014).


For information on ICT indicators in each of the sub-regions of the Asia-Pacific region, please visit our previous newsletter sub-regional corners: South Asia, East Asia, Pacific, Central Asia, and Southeast Asia.

\textsuperscript{2} The measurement used here is the ICT Development Index (IDI), a composite index combining 11 indicators – categorised into ICT access, ICT use and ICT skills – into one benchmark measure, and used as a tool to monitor and compare developments in ICT across countries. Theoretically, IDI values range from 0 to 10 and the greater the value, the higher the level of ICT development – globally, the average IDI value is 4.77 with the lowest IDI value of 0.96 in the Central African Republic and highest of 8.86 in Denmark. Further details on the methodology used to compute IDI values can be found in:  http://www.itu.int/en/ITU-D/Statistics/Documents/publications/mis2014/MIS2014_without_Annex_4.pdf
Overall, reflecting on the Education for All goals that have been set and vigorously attempted by many governments and organizations since 2000, as well as looking ahead to the Post-2015 Global agenda, education remains as “the” key drive for development and thus it will need to be further prioritized and better financed. The international community has learnt a great deal from this global collaboration, concluding that our targets need to be specific, relevant and measurable. We need to reach the marginalized and less advantaged groups, improve our data collection and its timeliness, and hold all of the stakeholders accountable to their promises and achievements. Even though much has been achieved, much more is yet to be done in the hope of providing quality education for all (UNESCO, 2015).

Contact info: Jollyn Peiling Cheong, jollyn_cheong@hotmail.com; Auken Tungatarova, a.tungatarova@unesco.org

References:


Programmes and Projects:

In line with the Qingdao Declaration which was adopted during the International Conference on ICT and Post-2015 Education in Qingdao, People’s Republic of China in May 2015, we would like to invite readers to visit some of our previous newsletter editions relevant to the focus areas identified in the Qingdao Declaration: namely, open educational resources and open solutions, quality assurance and recognition of online learning, monitoring evaluation (in resources); accountability and partnerships, and international cooperation (in news and events).

- For Open Educational Resources, click here to view the list of open and distance education projects for the marginalized, or click here for the Open Educational Resources page of UNESCO.
- For lifelong learning pathways, visit our edition on TVET, and non-formal learning for women.
- For online learning innovations, visit our MOOCs edition.
- For big data, visit our Big Data edition.

News and Events:

- **Central Asia Symposium on ICT in Education (CASIE) 2015**
  In order to promote accountability and partnerships in the sub-region of Central Asia, CASIE 2015 will continue to examine policies, strategies, and initiatives to address the growing need for systematic teacher education and professional development in Central Asia as well as for the effective integration of ICT in teaching and learning.

- **Open Call for Expressions of Interest: Research Network on New Digital Modes and Practices in Asia**
  The Foundation for Information Technology Education and Development (Philippines), as part of the Information Networks in Asia and Sub-Saharan Africa (INASSA) program, seeks to develop a Research Network on New Digital Learning Modes and Practices in Asia. All eligible parties are invited to submit an expression of interest in one or more of the priority research areas (MOOCs, gamification and game-based learning, intelligent tutoring systems, mobile learning, and learning analytics).

Resources:

- **Toward Monitoring the Post-2015 Education Agenda by looking back on the EFA goals in Asia-Pacific (UNESCO-UIS)**
  This UNESCO-UIS-AIMS fact sheet provides the progress made toward EFA in the Asia Pacific region, shares the persisting challenges, and provides recommendations on using the latest data from the UNESCO-UIS.

- **Post-2015 Education Indicators Consultation**
  In order to track the post-2015 education framework, UNESCO-UIS has released a new proposal for a set of appropriate indicators, developed through public consultations and feedback from various representatives of civil society, academia, development organizations, governments and other stakeholders. The new 42 thematic indicators will include six to ten to be used for the monitoring of the Sustainable Development Goals, while the rest will monitor progress towards the specific targets of the post-2015 education framework.
**World Development Indicators 2015**
This main World Bank collection of development indicators features the latest global development data, including national, regional and global estimates.

**World Bank DataFinder Mobile Apps**
This app provides World Bank data (since 2010) provides comparative charts of country indicators, create and save custom tables, available in four languages.

**Directory of Open Access Scholarly Journals in Education**
The Education Research Global Observatory provides a current directory of open access journals in education.

**Monitoring and Evaluation of ICT in Education Projects**
This Handbook provides a resource to policymakers who are looking for ways to measure impact of ICT on student achievement in developing contexts, as well as how to measure this impact, while considering the relevant issues at hand.

**New Publications:**

**Education for All 2000-2015: Achievements and Challenges**

**Asia-Pacific Regional Education for All Report: A Synthesis of the National EFA Reports**
This UNESCO Bangkok publication the country reviews provided include a quantitative account of the progress made towards the six EFA goals. Additionally, it examines the enabling and constraining factors for progress, and recommendations to move forward toward the post-2015 education agenda.

**Unleashing the Potential: Transforming Technical and Vocational Education and Training**
This brand new publication on TVET, intended as a resource for policy-makers to analyze trends and demands on education and training system, was created in response to the needs and challenges of education that require a global dialogue and action.

**Inside the News: Challenges and Aspiration of Women Journalists in Asia and the Pacific**
UNESCO Bangkok with UN Women and the International Federation of Journalists has just released a regional study assessing the situation of gender equality in the media of Asia-Pacific 20 years after the adoption of the Beijing Declaration and Platform of Action.

**OECD Skills Outlook 2015: Youth, Skills and Employability**
As young people continue to struggle to enter the labour market universally, this publication highlights the need for a more comprehensive approach toward improving their employability, especially in terms of collaboration between public and private sectors, and provides examples of successful policies.

**OECD: E-Learning in Higher Education in Latin America**
As the benefits of higher education are at the center of development discussions, the purpose of this report is to deconstruct the main challenges of higher education in Latin America as well as understand the role of ICT in transforming the field and positively influencing the region.

Next issue: The July issue will focus on the theme of ICT for Teacher Development. If our readers are interested in contributing to this edition, please do not hesitate to contact us.

Contact/Feedback: ict.bgk@unesco.org

ICT in Education website: http://www.unescokk.org/education/ict

View previous newsletters: http://www.unescobkk.org/education/ict/enewsletter