UNESCO-KEDI 2015 Asia-Pacific Regional Policy Seminar
Monitoring and Evaluation Systems, the Data Revolution, and Education 2030

26-28 November 2015, Bangkok, Thailand

Background Paper

I. Introduction

Over the past decades, countries in the Asia-Pacific region have successfully expanded coverage of education at all levels, particularly basic education. Yet issues of quality, equity, efficiency and system effectiveness remain major concerns as education systems in the region turn in mixed performances at international and national assessments. There is widespread recognition that monitoring and evaluation (M&E) systems play a significant role in providing stakeholders with increased accountability and evidence-based decision making. To this end robust data and proper analysis play an important role in improving resource utilization and strengthening education system performance. In order to provide data required in the process of diagnosing educational policy outcomes and formulating new plans, nations have put efforts in producing credible, relevant education statistics. The information age, which has greatly enhanced the ability to produce, collect and analyze data, has brought with it a *data revolution*: greater speed, greater volume, and greater detail of information available to a larger segment of the population than ever before.

Given the increasingly strong recognition in Asia-Pacific of the role that monitoring and accountability systems can play in improving resource utilization and strengthening education system performance, governments and development partners have been investing resources in establishing various frameworks and mechanisms for the monitoring and evaluation of education development. Presently, both developed and developing countries are introducing various policy initiatives, such as decentralization, school autonomy, and greater accountability for outcomes, to respond to today's changing societies in order to provide their citizens with quality and relevant education (OECD, 2013).
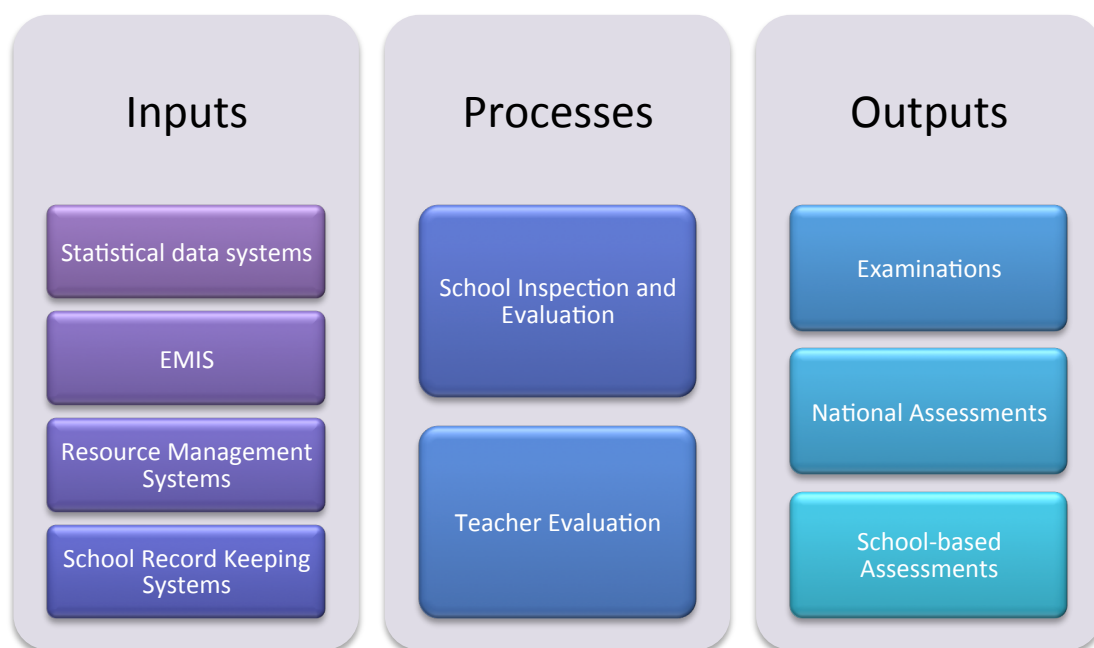
In continuity with these recent developments, the 2015 UNESCO-KEDI Regional Policy Seminar aims to examine M&E systems in education, their characteristics, and the current trends and challenges. There will also be an exploration into the *data revolution* and what it means for national education systems. As an ultimate objective, the seminar will provide strategies and recommendations for M&E systems to incorporate the targets and indicators of Education 2030.

II. M&E Systems in Education

In the education sector, monitoring and evaluation is needed for countries to properly assess how their education systems are performing. *Monitoring* refers to the on-going, systematic collection of information in order to assess progress towards stated objectives, outcomes and impacts. *Evaluation*, meanwhile, is the systematic and objective assessment of an on-going or completed project or programme, its design, implementation and results, to determine the relevance and fulfillment of objectives, efficiency, effectiveness, impact and sustainability (Mcloughlin and Walton, 2011).

In order to achieve these objectives, most education systems have developed several sub-components, namely: (1) school record keeping systems, (2) statistical data systems, (3) resource management systems, and (4) performance evaluation systems (UNESCO, 2015b). Each of these components is responsible for monitoring and evaluating various characteristics of the education sector – be it inputs, processes or outputs/outcomes. For example, school record keeping systems, statistical data systems, such as (EMIS), and resource management systems are mainly responsible for tracking and evaluating inputs and processes such as physical facilities, budgets, and staff. Schools inspections and evaluations are carried out regularly to further monitor education processes. And student assessments and examinations are developed to monitor and evaluate the quality of the outcomes of the education systems (see Figure 1).

Figure 1: M&E System Components

Inputs	Processes	Outputs
Statistical data systems	School Inspection and Evaluation	Examinations
EMIS		National Assessments
Resource Management Systems	Teacher Evaluation	School-based Assessments
School Record Keeping Systems		

However, the extent to which these sub-components have been integrated differ from country to country, as does the usage of information obtained from the M&E systems. The relationships between these sub-components are often unclear or poorly developed. Many countries typically have provisions or policies for the systems and components mentioned above, but often these are not well-coordinated and there is no systematic mechanism to ensure that these different systems mutually reinforce each other and provide an assessment of the education system in a holistic and comprehensive manner.

In the past many M&E systems have focused on evaluating the inputs and processes that are involved in delivering education, rather than on the outcomes. This is changing, as many countries are currently reforming their education systems with an aim of improving the quality of education by focusing on outcome related indicators (Mcloughlin and Walton, 2011; UNESCO, 2015a; UNESCO, 2015b). These reforms often focus around four key components in achieving well-functioning M&E systems: capacity, data effectiveness and relevance, effective coordination, and sufficient and sustained resources.

Capacity
Institutional capacity at all levels of administration is crucial for developing effective M&E systems. Evidence- and results-based planning and sector management require close communication and negotiation between statisticians and planners to ensure linkage between data and policies. Using the data for policy decisions

improves quality of data as well as capacity of policy makers and planners to understand the data and the data gap.

One of the major challenges facing M&E systems in the region is a lack of institutional capacity. This is reflected in a number of different ways, but mainly: 1) a lack of capacities among staff to analyze and generate policy relevant information from the data collected; and (2) data management and processing tasks are often assigned to staff who have little to no proper knowledge, skills, or training in handling data or ICTs (UNESCO, 2015b). The staff handling data is not always capable or qualified to conduct proper assessment, or there is not enough staff to do this work, leading to long delays in the production of the analysis, and therefore limiting the relevance.

Data Effectiveness and Relevance

The quality of data is critical to ensure the effectiveness of the M&E system. M&E systems are considered effective only when they produce accurate, relevant and timely information that is utilized to inform policy formulation and implementation. Countries in the Asia-Pacific region are making substantial efforts to improve effectiveness of the systems, but challenges remain. Many M&E systems in the AP region are not sufficiently prepared to collect and analyse the information, and the data is often not verified; therefore putting the quality and relevance of data into question. The labor intensiveness of the data collection and analysis in M&E often leaves little financial and human resources for data verification.

Improving effectiveness of M&E systems to ensure that M&E systems provide information relevant for policy goals is key. This is particularly challenging as the emphasis continues to shift towards evidence-based and results-based monitoring and evaluation. Yet, many of the existing M&E systems are not sufficiently prepared to regularly collect information on output and outcome information, resulting in countries unable to use relevant information to formulate policies, especially for those likely to be required in the 2030 education agenda. Further, M&E officials and policymakers often lack proper understand of the data and the purpose of the data, making it difficult to translate results.

Coordination

The necessary and supportive legal framework and policies are needed for building an M&E system of high quality. Many governments have taken initiatives to improve their monitoring and evaluation processes by establishing national M&E systems by building in more firmly institutionalized frameworks conducive to continuous and results-based M&E activities tied to planning, budget allocations, decision making for implementation and accountability. The importance of a strong legal framework also guides the management and coordination of the system as a whole. Clear roles and responsibilities, as well as communication among all stakeholders, is key.

Yet in many countries, education is the responsibility of multiple ministries, and the assessment of the various systems become the responsibility of multiple agencies, departments and ministries across various levels of government – national, regional, district and school level. Each may have different needs for M&E and therefore may develop their own M&E systems without necessarily informing others.

In addition to this "horizontal" coordination across different ministries involved in education, current trends towards more decentralized education systems also raises the issue of "vertical" coordination across different levels of the government. Often staff at the lower levels of the system (e.g. districts and schools) enter the data required without knowing how the information is used nor receiving any feedback for their data and therefore being excluded from planning, monitoring, and evaluation process.

As a result of these horizontal and vertical inefficiencies, considerable duplication and inconsistency occurs in the data as well as data collected unnecessarily. Schools are required to respond to various requests for data, often not knowing how the data they submitted will be used, nor knowing the results of the analysis

which could be useful for improving policies at the school level. Information sharing among the sub-components of the M&E systems is a crucial factor of improving the quality of data as well as effectiveness and efficiency of the M&E system (UNESCO 2015b).

Resources

Countries that have developed efficient, effective and sustainable M&E systems have been able to allocate sufficient resources for both for developing the necessary infrastructure and the human capacity needed. This is increasingly the case with advanced technology and the ever-increasing amounts of data to analyse.

M&E systems are costly – much time, effort, and resources are used collecting and analyzing data. A lack of financial resources at the national level impacts the amount of staff that is allocated to handle the M&E work. Having the appropriate staff skilled in what is needed (i.e. data management, planning, etc.) requires the appropriate level of training and therefore increases costs. One of the more significant factors is that many of the M&E systems in developing countries are supported and funded through external partners, which raises the question of sustainability.

In addition, the cost of M&E is expected to increase over time. For the 2030 education agenda, the emphasis of M&E systems are shifting from input indicators to process, output, and outcome indicators. Establishing such M&E systems is, however, difficult and resource-intensive. For instance, many of the "emerging" targets in the 2030 education agenda, such as global citizenship education, are extremely difficult to measure. Many of them will rely on information from surveys, which tend to require more resources even with use of advanced ICTs. Education policies and plans are often developed embedding such "complicated" and "difficult to collect" indicators without properly assessing the resources required for M&E, resulting in the inability for M&E systems to produce relevant information.

In short, well functioning M&E systems need to have capable staff at all levels of the M&E system, proper understanding and relevance of the data, a clear legal framework to guide the processes, and a sustained financial commitment.

III. Key Developments for M&E Systems

Data Revolution and Big Data

The last several years have seen a dramatic increase in how technology is transforming our lives and the amounts of data that are being collected due to new applications and programs. The collection and analysis of data is not new; however, the volume and speed at which data is increasing is. One estimate has it that 90% of the data in the world has been created in the last two years (Data Revolution Group, 2014). The advance of technology, expansion of mobile devices, and the ability to store data in incrementally smaller packages has produced a new age in information use and more importantly how we interact with information as a user. With these rapid advancements also comes a vast increase in the amount of data we consume and produce. This is the ***data revolution***: massive amounts of data, more diverse and complex than ever, new methods and tools for organizing, managing and processing it, as well as analysis, use and experimentation (Data Revolution Group, 2014). More importantly, the *data revolution* reflects the growing demand for data from all parts of society, not just traditional data users and analysts. It includes the growing recognition of ***big data***: datasets that are so large they are beyond the ability of typical database software tools to capture, store, manage, and analyse it. *Big Data* is characterized by the 3Vs - volume (the amount of information), velocity (the speed of data), and variety (the various types of data) (Mayer-Schonberger & Cukier, 2013; West, 2012; Dumon, 2014; Campbell et al, 2007; Data Revolution Group, 2014).

The data revolution and big data offer the opportunity for greater and deeper understanding of a wide range of issues and topics. It can support development in many ways, but primary among these are real-time awareness and feedback. This immediateness is important for developing and planning policies, while at the same time understanding where these policies are falling short and need adjustments. The application of big data is highly promising; the data revolution can help close key gaps in access and use of data: between developed and developing countries, between information-rich and information-poor people, and between the private and public sectors (Data Revolution Group, 2014). The data revolution should not only be about collecting appropriate data, but also about how it is used (Rose, 2014). The collection, analysis, and use of data can further be strengthened with the recommendations from the UN Secretary-General's Independent Expert Advisory Group (IEAG) on a Data Revolution for Sustainable Development. [1] The IEAG recommendations include: (1) Develop a global consensus on principles and standards; (2) Share technology and innovations for the common good; (3) New resources for capacity development; (4) Leadership for coordination and mobilization; and (5) Exploit some quick wins on SDG data. There is currently a tremendous opportunity to improve the data that is essential for decision-making, accountability and solving development challenges (Data Revolution Group, 2014).

While there are many opportunities arising through the data revolution, a few challenges present themselves. First, even though the volume and velocity of the data is tremendous, two main problems persist with this: 1) there is not enough high quality data, and 2) data is not used or is of such poor quality that it is unusable (Data Revolution Group, 2014). Without improving the quality of data, the ability to effectively utilize data will continue to be a challenge.

Second, there are also some serious risks with the use and application of education data. These issues include ensuring that learners' privacy is not infringed upon as well as data ownership. Many of these large datasets are held by a limited number of people, for example Ministries of Education and/or large private corporations. Access to information can be controlled, and without providing open access, this will create new and stronger digital divides (UNESCO IIET, 2012; Danah and Crawford, 2011). Indeed, education related data companies have been recently shut down, as concerns about privacy and the use of student data met strong resistance from the parents and the general public (Economist, 12/22/2014). Information privacy laws are still being formed in many countries, and these laws or legal frameworks are sometimes contradictory and unclear with regards to personal protection.

Third, the costs to store and manage such a large amount of data can be difficult to bear, particularly for developing countries, as they need to invest in both the infrastructure to maximize the data, and the human resources to properly utilize the data.

Lastly, the nature of the data itself and how to analyze it has changed. Many proponents also claim that "big data" will improve the objectivity and accuracy of the research, however this neglects the fact that researchers and analysts still need to choose the appropriate data and clean these large datasets. Choosing which data to analyze is not inherently objective. And just because we have more data, does not mean that the data is better. The researcher or analyst will still need to develop sound methodology in order to make sense of the information, clean out "noise", and create usable information.

Education Big Data
For education, the *data revolution* and *big data* may offer great opportunities and possibilities for improved learning outcomes. Education statistics provide various stakeholders with a variety of data not only by subject, but also by varying levels of analysis. Education systems can provide yearly statistical reports, however, the vast amount of data collected can also provide us with information on school safety, school

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[1] http://www.undatarevolution.org/about-ieag/

infrastructure, college tuition fees and loans, and the employment of college graduates, among others. The modalities of collection and use are becoming more diverse as well, with the increased use of mobile phones and Internet services.

During the last decade, learning analytics has emerged as a significant area of research into technology-enhanced learning. With a huge increase in the amount and frequency of data in education there is a great potential to harness this information to improve the quality of education.

Many people see the potential for improving learning outcomes, reducing dropout and repetition rates, and improving education investment efficiency. Opportunities also exist to increase educator effectiveness, deliver education for all that is tailored to individual learners needs and equip students with relevant skills for their future careers. In fact, many of these opportunities to use data and digital learning analytics are already changing education in several ways (Dumon, 2014; West, 2012; Campbell et al, 2007). Big data tracks interaction and direct feedback between learners and teachers, continuous monitoring of progress and attendance, more opportunities for personalized learning and guided pathways to the students' interests. Data mining and data analytic software can provide immediate feedback to students and teachers about academic performance. That approach can analyze underlying patterns in order to predict student outcomes such as dropping out, needing extra help, or being capable of more demanding assignments. It can identify pedagogic approaches that seem most effective with particular students (Ferguson, 2012; Long and Siemens, 2011).

Increasing use of technology in and out of the classroom for educational purposes, such as the use of tablets and mobiles as well as new online educational programs, allow for increasing amounts of data to be collected and stored. These techniques are already being used by some companies and more commonly higher education institutes, and are becoming increasingly popular to address certain shortcomings in modern education systems (Long and Siemens, 2011; Rose, 2014; Ferguson, 2012). At the macro level, the analysis of this data can contribute to sound policy development by providing access to numerous factors from the environments, approaches, and pedagogies that bring about actual results.

In order to best make use of the opportunity for the data revolution, countries should aim to: lower the barriers to innovation, strengthen innovation, and increase public sector adoption of these innovations. Governments can create clear regulatory and legal frameworks that bring standards for data sharing and privacy, making it easier for both users and producers of data. Improving knowledge sharing and bringing all stakeholders together (public, private, community, etc.) will align priorities and create common purposes (UN Global Pulse, 2014). The data revolution has real potential to assist the M&E process, however its features and limitations need to be adequately understood when interpreting the data.

Education 2030 Agenda

This year, 2015, marks the start of a new chapter in the global development agenda. In September 2015, the 17 Sustainable Development Goals (SDGs) (see Figure 4 in appendix) will be adopted at the United Nations Summit in New York succeed the Millennium Development Goals (MDGs). Earlier this year, the global education community convened to discuss how to succeed the Education for All initiative. The **Incheon Declaration**[2], adopted on 21 May 2015 at the World Education Forum (WEF) held in Incheon, Republic of Korea, constitutes the commitment of the education community to Education 2030. This new education agenda 'Education 2030' is fully captured in the Sustainable Development Goal (SDG 4), *"Ensure inclusive and equitable quality education and promote life-long learning opportunities for all"* and its corresponding targets (Figure 2). The **Education 2030 Framework for Action (FFA)**[3] serves as the overall guiding framework

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[2] http://en.unesco.org/world-education-forum-2015/incheon-declaration
[3] World Education Forum 2015. Draft Framework For Action Education 2030: Towards inclusive and equitable quality education and lifelong learning for all.

for the implementation of Education 2030 and outlines how to translate the commitment made in Incheon into practice at the global, regional and national level. It aims at supporting all countries to realize their own vision and ambitions for education within the framework of SDG 4 and its targets and proposes ways of implementing, coordinating, financing and monitoring Education 2030 to ensure equal education opportunities for all.

Over the past two decades, the Millennium Development Goals (MDG) monitoring process has led to an impressive increase in statistical capacity and data availability across the developing world, but more can be done. Rapid development in technology and expansion of its availability, even in the poorest countries in the region, have made it possible for many countries to tap vast amounts of education related data. The monitoring, reporting and evaluation of SDG 4 requires better and further disaggregated data and more robust processes, and thus, orientation and capacity development in this area are also needed. This is therefore an opportune time for countries to develop education M&E frameworks that fully reflect the priorities of the 2030 development agenda and incorporate the best use of new technology and analyze increasing amounts of data.

Figure 2: Sustainable Development Goal 4 (Education)

Goals:
4.1 By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes
4.2 By 2030 ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education
4.3 By 2030 ensure equal access for all women and men to affordable quality technical, vocational and tertiary education, including university
4.4 By 2030, increase by x% the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship
4.5 By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples, and children in vulnerable situations
4.6 By 2030 ensure that all youth and at least x% of adults, both men and women, achieve literacy and numeracy
4.7 By 2030 ensure all learners acquire knowledge and skills needed to promote sustainable development, including among others through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship, and appreciation of cultural diversity and of culture's contribution to sustainable development

Implementation Means:
4a Build and upgrade education facilities that are child, disability and gender sensitivie and provide safe, non-violent, inclusive and effective learning environments for all
4b By 2020, expand by (x) per cent globally the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries
4c By 2030, increase by (x) per cent the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States

IV. Strategies and Way Forward for M&E systems

The Education 2030 agenda will require new input, process, and output indicators on issues like early childhood education, education financing, education for global citizenship and sustainable development, and teacher motivation, salary and training. The integration of various sub-components (i.e. education financing vs. school/teacher/student performance) within national M&E systems will be key to improving reporting, policy making and implementation efforts. In addition, regular and reliable national measurement of learning outcomes and other targets of interest will play a critical role in monitoring progress towards the proposed education goals. Countries should seek to improve the quality and timeliness of reporting. In order to better measure and monitor equity and inclusion, efforts should be taken to extend the ability of governments to report education indicators by disaggregation such as sex, wealth, location, ethnicity, language, socio-economic status or disability and to effectively use them for planning and policy-making. To

address current gaps in the M&E system, countries will need to build capacity at all levels, collect and share data utilizing ICTs, improve data analysis and reporting, further develop legal frameworks and standards, improve coordination among stakeholders, and increase resources and utilize them efficiently.

Capacity

Improved capacity is important at all levels of the M&E process. This includes improved leadership and management at the top-levels to ensure coordination across multiple organizations. Proper data appreciation and utilization is crucial for top-level officials, particularly those involved in policy and planning decisions. Improved technical skills for M&E staff who conduct different types of analysis and evaluation, as well as continuous training and promotion opportunities will attract and retain qualified professionals. Finally, improved dissemination skills, advocacy and reporting of results to all stakeholders will allow informed decisions and deliberations.

Data Effectiveness

Monitoring and evaluation systems need a suitable data development strategy for improving the data processing speed and quality. Further governments need to embrace new ICTs, and introduce wherever possible the latest technology in order to handle the increasing volume, variety, and speed of data. In addition, improving data infrastructure and integrating multiple databases, to improve analysis and evaluation, and to harmonize coordination efforts is key. As one of the biggest challenges of the data revolution, enhancing the ability to make use of the volume of data is crucial. Suitable methodologies must be evolved to capture all aspects of monitoring and evaluation.

In addition to improved technical capabilities with regards to data, identifying appropriate indicators for Education 2030 and M&E systems is crucial. As M&E systems shift to capturing outcomes on issues like early childhood education, education financing, education for global citizenship and sustainable development, and teacher motivation, utilization of the evidence is crucial to inform decisions that can address education challenges. M&E must be seen as essential inputs to reporting – this means that education systems need to ensure sensitization, advocacy and capacity building in using of information in an efficient manner to all stakeholders.

Coordination

In order to impact the M&E System from the top down, a strong legal framework is necessary to clarify the various roles and responsibilities of all stakeholders. Further, a legal framework properly holds these stakeholders accountable for the processes and outcomes. This would include proper communication between line ministries responsible for M&E, data collection and analysis, and improved programme planning highlighted with strong management. Finally, a strong committed central leadership is important to ensure that these measures are implemented and carried out.

In addition, community led initiatives can play a significant role in M&E systems. Communities are often involved in providing supplementary resources to the education system and in some cases even operate the schools (e.g. Cambodia and Bhutan) (Bray, 1999; Bhutan, 1999). And community led initiatives such as ASER (India and Pakistan) and UWEZO (Tanzania, Kenya and Uganda) utilize the efforts of volunteers and parents to collect student performance data at the household level. The provision of education generates great interest and demand from all stakeholders. For ensuring greater accountability and transparency, there is a need for better utilization of evidence for monitoring by the communities and other providers of education.

Resources

Nations need to create and manage a detailed budget, one that is dedicated to the processes and inputs necessary for M&E systems. This would include detailing the necessary infrastructure, staff, and training for

the M&E to be effective. Government officials need to be made aware of the importance of M&E systems in order to secure adequate and sustained resources over the long-term.

Figure 3: *Big Data* & M&E for Education 2030
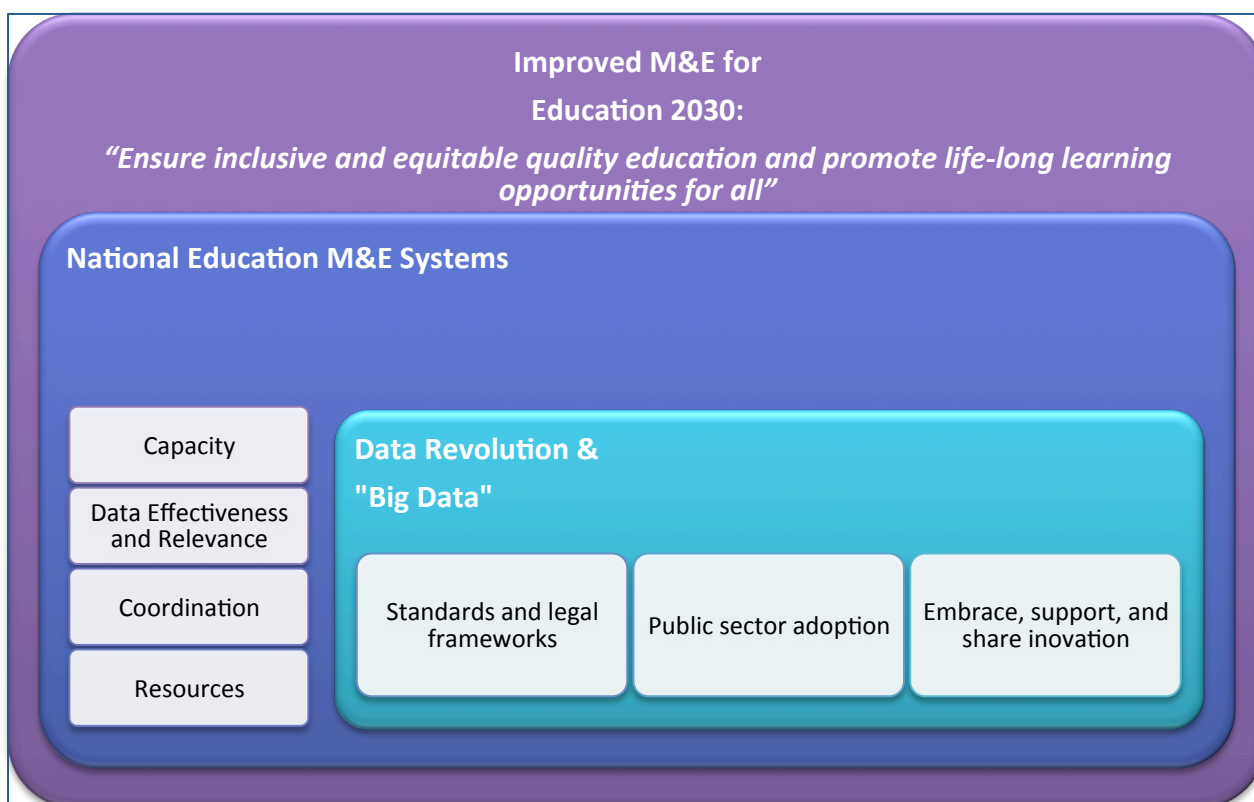
V. CONCLUSION

Countries in the Asia-Pacific region vary in the effectiveness of their national M&E systems. Some countries have effective systems that provide valuable evidence that can be used to improve education planning, while others have uncoordinated and bloated systems that produce little relevant information. In order to meet the Education 2030 goals, robust monitoring, reporting and evaluation policies, systems and tools are essential. Education monitoring and evaluation requires a multi-dimensional approach, covering system design, inputs, content, processes and outcomes. In conjunction with this, improving the use and utilization of *big data* and the *data revolution* will provide nations with enhanced collecting and reporting methods. As the primary responsibility for monitoring lies at the country level, countries need to build effective monitoring and accountability mechanisms, adapted to national priorities, in consultation with civil society. The 2015 UNESCO-KEDI Regional Policy Seminar will bring together various countries in the region to share experiences and knowledge to enhance M&E systems as well as how to take advantage of the *data revolution* and *big data* for M&E systems as we move towards the Education 2030 agenda.

2015 UNESCO-KEDI Regional Policy Seminar Objectives

The 2015 UNESCO-KEDI Regional Policy Seminar aims to explore ways to strengthen M&E systems in the Asia-Pacific utilizing *big data* as part of the *data revolution*. The objectives for the seminar and research are: 1) to review current M&E systems in the Asia-Pacific region, 2) examine how the *data revolution* and *big data* can be used to effectively and efficiently improve M&E systems, and 3) provide policy

recommendations for Asia-Pacific nations to improve their M&E systems to implement the upcoming 2030 education agenda.

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Appendix

Figure 4: Proposed Sustainable Development Goals

1. End poverty in all its forms everywhere

2. End hunger, achieve food security and improved nutrition, and promote sustainable agriculture

3. Ensure healthy lives and promote well-being for all at all ages

4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

5. Achieve gender equality and empower all women and girls

6. Ensure availability and sustainable management of water and sanitation for all

7. Ensure access to affordable, reliable, sustainable and modern energy for all

8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

10. Reduce inequality within and among countries

11. Make cities and human settlements inclusive, safe, resilient and sustainable

12. Ensure sustainable consumption and production patterns

13. Take urgent action to combat climate change and its impacts

14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development

15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

17. Strengthen the means of implementation and revitalize the global partnership for sustainable development