Monitoring and Evaluation Systems, the Data Revolution, and Education 2030: The Case of Cambodia

Presenter: Dr. Nary Tao
Introduction and Background

- Education Structure
  - Pre-school education: 3 years
  - Primary school: Grades 1-6
  - Lower secondary: Grades 7-9
  - Upper secondary: Grades 10-12
  - Technical and Vocational Training
  - Higher Education
Introduction and Background

- Administration
  Central ➔ Provincial ➔ District ➔ School levels

- Finance:
  MoEYS share as % of GDP 2.2 (2015) and 2.4% (2016)
Overview of M&E Systems

- Education Management Information System (EMIS) since 1996: education statistics and indicators annually published
- School Inspection: conducted by national team and provincial team
- Evaluation of Student performance
  - Classroom-based Assessment (quizzes, tests, exams)
Overview of M&E Systems

- School-based Examinations (Grade 9)
- National Public Examinations (Grade 12)
- National Assessment (Grades 3 & 6 (Khmer Language & Mathematics) & Grade 8 (Khmer Language, Science, & Mathematics)
- Regional Assessment: South-East Asia Primary Learning Metric (SEA-PLM): initially grade 5 (Reading, Writing, Mathematics, & Global Citizenship) (Pilot in early 2016; Main study in 2017)
## Overview of Education Data

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<tr>
<th>Types of Data</th>
<th>Data Collection</th>
<th>Data Analysis</th>
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<tr>
<td>EMIS</td>
<td>Education staff &amp; annual school census</td>
<td>Descriptive statistics (SPSS)</td>
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<tr>
<td>Classroom, School based and National Exams</td>
<td>Raw score</td>
<td>Descriptive statistics (SPSS)</td>
</tr>
<tr>
<td>National Assessment &amp; Regional Assessment (SEA-PLM)</td>
<td>Student responses &amp; contextual information</td>
<td>Item Response Theory (IRT) (WinDem, SPSS, &amp; KeyQuest)</td>
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<tr>
<td>School Inspection</td>
<td>Documents, observations, questionnaires, &amp; interviews</td>
<td>Descriptive statistics (SPSS)</td>
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## Overview of Education Data

### Utilizing Assessment Data

<table>
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<tr>
<th>Types of Assessment Data</th>
<th>Use</th>
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<tr>
<td>Classroom based Assessment</td>
<td>Promote or Pass/Fail students (i.e., Summative Purposes)</td>
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<tr>
<td>School-based &amp; National</td>
<td>Certification (i.e., Summative Purposes)</td>
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<td>Examination</td>
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<td>National Assessment</td>
<td>▪ Provide teacher improvement agendas</td>
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<td>▪ Inform the direction of curriculum reform</td>
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<tr>
<td>Regional Assessment (SEA-PLM)</td>
<td>▪ Provide formative feedback</td>
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<td>▪ Inform teacher improvement agendas</td>
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<td>▪ Provide a helpful framework for curriculum reform initiatives</td>
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<td>▪ Assess equity within and across participating countries in the ASIAN region</td>
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Overview of Education Data

- Utilizing the Data Revolution
  - Organizing data
    Develop harmonized methodologies for deriving commons estimates based on available data, while developing new comparative data sources
  - Utilizing data
    Develop standards, build capacity and share data
Overview of Key M & E Themes

- Capacity

Analysing big data: Lack of capacity to analyse and generate reports on a described proficiency scale (i.e. giving both quantitative results and qualitative descriptions)
Overview of Key M & E Themes

- Data Effectiveness
  - EMIS: basic education sector data of government schools are captured, lack data of private schools, HEIs, Vocational, financial data, & student assessment data
  - National Assessment Data: delay the dissemination of a report (Grade 6 undertaken since 2012) to the public
Overview of Key M & E Themes

- Coordination
  - Uncoordinated and bloated systems (MoEYS Department of Planning has difficulties in obtaining sufficient data from other departments)
Overview of Key M & E Themes

- **Resources**
  - Human Resource: national capacity to analyse, interpret, and disseminate reports is still limited
  - Material Resource: there is a gap in the current data collection (EMIS dealing with only school census) & the data obtained through school inspection is for the sake of compliance
Achievements and Challenges

- Achievements
  - Considerable progress for *Education for All*
  - National Assessment: Grades 3, 6, & 8 undertaken
  - Education Statistics & Indicators generated (Year book)
Achievements and Challenges

Challenges
- Stability of funding sources
- Capacity building in management and technical skills
- Institutionalization of monitoring & evaluation system
- Dissemination and use of assessment results
- The financing of education system is inadequate
- The quality of education system is in question
Strategies and Recommendations

- Balance classroom and school based assessments for **formative purposes** and national public exams for **summative functions**

- Support **capacity building** (i.e., enhancing capacity to develop and implement sound and rigorous survey-based assessment and to analyse, interpret, and disseminate **assessment data** to informing **education policy**)

Strategies and Recommendations

- Increase **funding** to support M & E implementation of the agenda

- Have **regional cooperation** and **coordination** of M & E (data collection, analysis and reporting)
Strategies and Recommendations

- Develop sound national monitoring and evaluation systems

Figure 1: A Three-dimensional Approach
Any Questions?
Thank You For Your Attention!

"Learning is not a product of schooling but the lifelong attempt to acquire it" – Albert Einstein