The National Assessment of Education Quality in China
01 BACKGROUND
The Status of Chinese Compulsory Education

Access to schools for all

- After 40 years of development, China has achieved the goal of the 9 year compulsory education

High quality education for all

- Currently, the quality and equity of basic education has become a major concern of society
The Status of Chinese Compulsory Education

Public Expectations for basic education in China:

- Education Quality
- Students’ Holistic Development
International Experiences

International Organizations
Program of International Student Assessment (PISA)
Trends in International Mathematics and Science Study (TIMSS)
Progress in International Reading Literacy Study (PIRLS)

Developed Countries
National Assessment of Educational Progress (NAEP) —— America
The Directorate for evaluation, forecast and performance (DEPP) —— France
National Institute for Educational Policy Research (NIER) —— Japan

Australian Council for Educational Research (ACER) —— Australia
Korea Institute for Curriculum and Evaluation (KICE) —— Korea
Hong Kong Examinations and Assessment Authority (EA) —— HK

Developing Countries
Latin American Laboratory for Assessment of the Quality of Education, LLECE
Programmed’Analyse des Systèmes Educatifs de la CONFEMEN, PASEC
National Assessment Center of Education Quality (NAEQ)

**Mission:**

- To construct standards for monitoring the quality of basic education
- To research and develop tools for monitoring the quality of basic education
- To implement the work of monitoring the quality of basic education nationwide upon the authorization of the Ministry of Education
- To support and guide work for the local governments on basic education monitoring
02

EXPLORATION
## Exploration: Pilot Assessments

### 8 years (2007-2014)

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<td><strong>Sample Type and Size</strong></td>
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<tr>
<td>Counties</td>
<td>15</td>
<td>50</td>
<td>30</td>
<td>79</td>
<td>104</td>
<td>271</td>
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<td>Schools</td>
<td>295</td>
<td>900</td>
<td>450</td>
<td>1,398</td>
<td>1,675</td>
<td>4913</td>
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<td>Principals</td>
<td>295</td>
<td>900</td>
<td>450</td>
<td>1,398</td>
<td>1,675</td>
<td>4,868</td>
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<td>1,911</td>
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<tr>
<td>Teachers</td>
<td>295</td>
<td>5,961</td>
<td>3,711</td>
<td>8,575</td>
<td>5,899</td>
<td>48,642</td>
<td>20,348</td>
<td>18,500</td>
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<tr>
<td>Students</td>
<td>14,009</td>
<td>34,910</td>
<td>18,900</td>
<td>56,760</td>
<td>64,265</td>
<td>190,104</td>
<td>82,304</td>
<td>64,288</td>
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**Exploration:** Pilot Assessments, 8 years (2007-2014)
Establishment of Assessment System

April 15th 2015

National Compulsory Education Quality Assessment System

The 2017 National Assessment was successfully conducted on May 25th.
03 NATIONAL COMPULSORY EDUCATION QUALITY ASSESSMENT SYSTEM
Assessment Content Areas & Tests

Grade 4 & 8 Students

• Avoid the impact of test-oriented education
• Critical development period
• International experiences (e.g. NAEP, TIMSS)

Content

• 6 subjects: Math, Chinese, Science, P.E., Arts, Moral Education
• 3 aspects:
  • —knowledge & skills mastery
  • —problem-solving ability
  • —contextual information

Assessments

• Paper-and-pencil assessment
• Performance assessment
Assessment Cycles & Schedule

Mid-June

1st year
- Math
- Physical Education

2nd year
- Chinese
- Arts

3rd year
- Science
- Moral Education

3 Years a Cycle
Assessment Framework——Mathematics

Mathematics Assessment Framework

<table>
<thead>
<tr>
<th>Academic performance</th>
<th>Emotions/Attitudes</th>
<th>Contextual information</th>
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</thead>
<tbody>
<tr>
<td>Operation</td>
<td>Interest</td>
<td>Teachers’ education background</td>
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<tr>
<td>Space</td>
<td>Confidence</td>
<td>Age</td>
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<tr>
<td>Data analysis</td>
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<td>Teaching behaviors</td>
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<tr>
<td>Reasoning</td>
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<td>Media equipment</td>
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<td>Solving</td>
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<td>Internet usage</td>
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<tr>
<td></td>
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<td>Class hours per week</td>
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<td>Homework hours</td>
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Assessment Framework——P.E.

P.E. Framework

Questionnaire

Interest
Attitude
Habit

P.E. Implementation in School

-- Voluntary Exercise
-- Sleeping Time

-- Curriculum
-- P.E. Activities
-- Facilities
-- Teaching

Spot Test

Physical health condition

-- Height, Weight, Body Mass Index (BMI)

-- Body Function: Vital Capacity, Vision

-- Physical Ability: Power, Speed, Endurance
Assessment Framework——Arts

**Music**
- Knowing & Understanding
  - Knowledge and understanding of music & visual arts elements and terms;
  - Knowledge of the personal, historical and cultural characteristics of Chinese and foreign classic works.

**Visual arts**
- Appreciation & Evaluation
  - Identifying and evaluating the genres, forms, themes, styles, emotion of music and visual art works.

**Performance & Creation**
- Singing & Creating the simple melody or rhyme.
- Drawing and reflecting upon their own artworks

**Interests & Involvement in arts activities**
Sampling Design

Select Counties

- 31 provinces, autonomous regions, and municipalities, and the Xinjiang Production and Construction Corps
- more than 6 counties in each province, and 10 per cent counties were selected in total

Select Schools

- PPS method
- more than 12 elementary schools & 8 secondary schools per county

Select Students

- Grade 4th and 8th
- more than 30 students per school
- 3600 students per province

Sampling error < 1% to represent the whole country
Sampling error < 4% to represent almost all provinces
Setting the Performance Standards

- **Two methods were considered:**
  - Angoff method
  - Bookmark method

- **Process**
  - Judgment panel including 15 persons with diverse backgrounds
  - Three-day meeting within each panel
  - Three stages were conducted for the whole process
The Use of Assessment Reports

**Assessment Report**

- **Preliminary Data**
  - Present preliminary data in counties
  - Internal use only

- **Provincial**
  - Academic achievement in province/municipality level
  - Influential factors
  - Not published

- **National**
  - Academic achievement in national level
  - Influential factors
  - Publish result to the public
04

SOME REMARKS
Future Development

Compulsory Education

Early Childhood & High School

Paper-pencil Based

Computer Based, Performance Assessment, Big Data...

Students Literacy

Influential Factors
Debates Still Exist

- How to define the quality of basic education?
- Should the National Curriculum Standards be a guideline for developing the Assessment Standards?
- Should we establish the unified standards or diverse standards to reflect huge difference among different regions?
THANK YOU!