School Development based on Assessments for Quality Education in the Republic of Korea

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Governmental Institutions

- KEDI (Korea Educational Development Institute)
- KICE (Korea Institute of Curriculum and Evaluation)
- KERIS (Korea Education and Research Information Service)
- NILE (National Institute for Lifelong Education)
- KRIVET (Korea Research Institute for Vocational Education and Training)

Ministry of Education

17 Provincial Offices of Education

Schools
Significance of Assessment - national level

Gathering, analyzing, and using information about student learning

Collecting Objective Data
- NAEA, CSAT
- Improving teaching and learning
- Diagnosing students’ academic performance
- Providing materials for educational uses and policies

Educational Accountability
- Educational policy making
- Raising accountabilities of school, school district, and government
Purpose of the National Assessment of Educational Achievement (NAEA)

**NAEA**

**DIAGNOSING**: Academic achievement

**PROVIDING**: Data and information

**EXPLORING**: New research design and methods

**IMPROVING**: Teaching and learning

**ENHANCING**: School’s accountability
The nation should perform NAEA for all students compulsorily every year (except Elementary school). Individual schools should announce the results in public.

“Zero Below-Basic Plan (2008~2012)”
“Upward Equalization” as government agenda
### NAEA Survey based on Contextual Variables

<table>
<thead>
<tr>
<th>STUDENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Personal and Family Background</td>
</tr>
<tr>
<td>- Extracurricular Activities</td>
</tr>
<tr>
<td>- Learning Method and Attitude</td>
</tr>
<tr>
<td>- School Life</td>
</tr>
<tr>
<td>- Learning Related to Each Subject</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TEACHERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Personal Background</td>
</tr>
<tr>
<td>- Teaching Activities Related to Each Subject</td>
</tr>
<tr>
<td>- Job’s Satisfaction</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SCHOOLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>- School Features</td>
</tr>
<tr>
<td>- School Facilities</td>
</tr>
<tr>
<td>- School-Level Curriculum Management</td>
</tr>
<tr>
<td>- School Climate</td>
</tr>
</tbody>
</table>
Cut-scores to divide achievement levels
- Performance Level Descriptions

Standard Setting

Advanced level
- Advanced cut-off score

Proficient level
- Proficient cut-off score

Basic level
- Basic cut-off score

Below-Basic level
<table>
<thead>
<tr>
<th>Achievement Levels of NAEA</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADVANCED Level</td>
<td>Superior academic performance of required knowledge and skills</td>
</tr>
<tr>
<td></td>
<td><em>(Above 80% reached to the desired performance that must be achieved in each content and grade)</em></td>
</tr>
<tr>
<td>PROFICIENT Level</td>
<td>Solid academic performance of required knowledge and skills</td>
</tr>
<tr>
<td></td>
<td><em>(50 – 80% reached to the desired performance that must be achieved in each content and grade)</em></td>
</tr>
<tr>
<td>BASIC Level</td>
<td>Partial mastery of required knowledge and skills</td>
</tr>
<tr>
<td></td>
<td><em>(20 – 50% reached to the desired performance that must be achieved in each content and grade)</em></td>
</tr>
</tbody>
</table>

**Base Line of basic academic achievement**
## Trends of NAEA

### Achievement Progress in Five Subjects: Grade 9 (2010 ~ 2013)

<table>
<thead>
<tr>
<th>Subject</th>
<th>'10</th>
<th>'11</th>
<th>'12</th>
<th>'13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Korean Language</td>
<td>23.1</td>
<td>31.0</td>
<td>31.1</td>
<td>31.1</td>
</tr>
<tr>
<td>Social Study</td>
<td>49.9</td>
<td>50.3</td>
<td>52.5</td>
<td>52.7</td>
</tr>
<tr>
<td>Math</td>
<td>34.5</td>
<td>29.5</td>
<td>26.3</td>
<td>28.0</td>
</tr>
<tr>
<td>Science</td>
<td>34.5</td>
<td>31.5</td>
<td>29.3</td>
<td>21.7</td>
</tr>
<tr>
<td>English</td>
<td>5.1</td>
<td>6.5</td>
<td>6.7</td>
<td>6.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Percentage (%)</th>
<th>'10</th>
<th>'11</th>
<th>'12</th>
<th>'13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below basic</td>
<td>21.6</td>
<td>14.5</td>
<td>18.9</td>
<td>12.6</td>
</tr>
<tr>
<td>Basic</td>
<td>21.6</td>
<td>20.6</td>
<td>16.6</td>
<td>28.1</td>
</tr>
<tr>
<td>Proficient</td>
<td>37.7</td>
<td>44.0</td>
<td>50.0</td>
<td>46.9</td>
</tr>
<tr>
<td>Advanced</td>
<td>5.0</td>
<td>5.0</td>
<td>5.0</td>
<td>5.0</td>
</tr>
</tbody>
</table>
Outcomes of “School For Improvement” Policy: After School Program

Provided by MOE(2013)
Regional gap

Trying to reduce the regional gap

% of below basic in 17 provinces
School Information Disclosure

Release the results of the assessment to the public to build a “comprehensive student service mechanism”

- Uploading achievement levels and SPI on “School Reporter” for the public
  - School Reporter: www.schoolinfo.go.kr

✓ Act on the Disclosure of Information of Education-related Institutions
✓ Enforcement Decree of the Act

- Once a year
- Number of students who took the NAEA
- Percentage of students at each level (Below Basic, Basic, Proficient and Advanced)
- School Progress Index www.schoolinfo.go.kr
Dissemination of NAEA results
Use of the NAEA Results for school development

- Achievement Affirmation
- Improving Learning Methods
- Opportunity to Learn

Results of NAEA

- Analysis of the Results
- Audits on Accountability
- Policies for Improving Ability
- Support Guidance

**Students**
- Request for Learning Support

**Government (MOE, KICE)**
- Informing School's Achievement
- Support Plans for Improving Achievements

**Schools**
- Plans for Improving Achievement
- Supplementary Plans and Programs
- Information Disclosure
- Managing Student's Achievement

**Offices of Education**
- Supplement Learning Plans for Improvement
- Self-Evaluation by Schools

- Plans for Supporting Schools and Implementations
- Guidance and Supervision of School Performance

Programs by Schools and Financial Support

**Parents**
- Plan-Based Education

**Educators**
- Educational Policies for Improving Achievements
1) Increasing quality schools
Serve as indicators of school achievement and a method of objectively evaluating the quality of schools

2) Attaining policy goals for the improvement of basic education
The school support policy has been executed since 2009 and has shown significant positive results in raising school capacity and supporting low achieving students.

3) Contribution to standardization rates of student
Reducing the achievement gaps between the urban and rural areas
Student Assessments at the International Level

- **PISA**: The OECD Programme for International Student Assessment
- **TIMSS**: Trends in International Mathematics and Science Study
- **ICILS**: International Computer and Information Literacy Study
Percentage of students at different levels.
PISA: Reading by Proficiency level

PISA: Reading by Proficiency Level

- Level 6
- Level 5
- Level 4
- Level 3
- Level 2
- Level 1 and Below
Trends in Science Literacy by Gender

PISA 2003:
- Male: 561 points
- Female: 541 points
- Difference: 20 points

PISA 2006:
- Male: 546 points
- Female: 527 points
- Difference: 19 points

PISA 2009:
- Male: 537 points
- Female: 539 points
- Difference: 2 points

PISA 2012:
- Male: 539 points
- Female: 539 points
- Difference: 0 points
Trends of Korean Students in TIMSS

Both math & science achievement of TIMSS 2011 increased from TIMSS 1995

Math & science achievement tend to be increased
Implications from PISA/TIMSS

1) top/low performing students
2) Gender Difference in Science & Math
3) Index of Affective characteristics in PISA/TIMSS

**Interest**

- Korea: 8%, 26%, 36%, 42%, 56%
- Inter. Avg: 31%

**Confidence**

- Confident: 3%, 14%, 34%, 45%, 63%
- Somewhat confident: 31%
- Not confident: 41%

**Value**

- Value: 14%
- Somewhat value: 46%
- Do not value: 34%
Free Semester Program

- Free Semester Program is to help students develop self-directed learning skills & attitudes by exploring their career and dream for one semester.
- Middle schools should implement the Free Semester for one semester.

- There were excessive competition and university entrance exam-oriented education in the past, but the educational environment tries to be changed to the direction of students’ happiness, talents, and dreams.
Challenges in Korea’s education

- Exploration of the reasons of affective achievement of various domains as well as finding the teaching and learning support plan for affective achievement.

- How to aligning curriculum, teaching and assessment at international, national, regional and school level.

- How to focusing on the types of skills requested at global level
  - upcoming 2015 revised national curriculum in Korea
Thank you for your attention!

Further Information

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