Integrating Non-cognitive Skills in Education Policy and Practice
Case of Japan

ERI-net annual meeting:
Transition to a better and higher learning,
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- **Domestic issues**
  - Limited energy supply
  - Repeated natural disasters
  - Less in-service training within companies

- **Global challenging issues**
  - Economic stagnation
  - Depletion of natural resources
  - Environmental issues
  - Food security

- **Demographic Change**
  - Aging Society
  - 2060 estimate
    - 30% decline in population (as in 2010)
    - 40% of population – 65 years+

- **Changing society and community**
  - Less bonding within the local communities

- **Accelerating globalization**
  - Further mobilization of people, money, information, etc
  - More international competition with emerging nations

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**Further direction**

Establishment of life long learning society based on three principles

1. Development of social competency for survival
2. Development of human resources for brighter future
3. Establishment of learning safety net with diverse abilities
4. Establishment of vibrant communities

**Creativity**

- Creation of new values
- Social participation with sense of collaboration
- Self-reliance
- Collaboration
Solid academic Prowess

Basic Knowledge
Learn & think themselves
Make decisions

Well-rounded character
Self-Control (discipline)
Cooperate with others
Empathy

Healthy Body
Physical Health
Mental Health

Balance between acquisition of knowledge/skills & sense of judgment / critical thinking

Need for coping with rapidly changing environments in knowledge-based society

Need for strengthening ability to “think”, “express” and “make decisions”

Source: MEXT (2011)
2. Educational Policy Reform – The Courses of Study

Guidelines for national curriculum development
Revised every 10 years (6 revisions since 1946)
Importance of non-cognitive aspects was already incorporated

'70s: Chi-Toku-Tai
Solid academic prowess, well-rounded character and healthy body

'98 : Zest for Living

The 1998 Courses of Study

- Introduction of “Zest for Living”
- 30% reduction of curriculum contents and lesson hours
- “five-day school week”
- “Integrated Study Period”

Lessons learned from the 1998 Courses of Study
- Lack of shared understanding among stakeholders
- Overestimating self-reliance of students
- Lack of integration of problem-solving approach to subjects
- Insufficient lesson hours for experience-based learning
- Underestimating decline in educational functions of families/communities

Source: MEXT (2011)
2. Education Policy Reform

**Basic Act on Education (2006)**

1) Education goals:
   - Enriched sense of morale
   - Self-reliance, civic responsibility
   - Respect for Japanese culture & tradition
   - World peace and contribution
2) Enhancement of “individual unique ability”
3) Other new ideas: lifelong-learning, collaboration among schools, parents and communities

**Amendment of “School Education Act” (2007)**

1) Learn basic knowledge and skills
2) Acquire decision making, thinking, and expression skills to solve issues
3) Positive attitude toward learning

**Challenges & issues**

- Reading comprehension, applied learning
- Learning attitude, study habit, lifestyle
- Lack of confidence, uncertainty about future
- Decline in physical strength

The 2008 New Courses of Study was developed to fulfill the concept
The 2008 New Courses of Study

1. Curriculum change
   - To foster abilities to **think, express and make a decision**
   - To learn more about Japanese culture and tradition
   - To enrich moral education
   - To keep students healthy
   - To cover current social and global issues for teaching and learning
   - To increase experience-based learning opportunities
   - To foster math and science skill
   - To increase foreign language education opportunities

2. Increase in lesson hours and contents
   - Japanese language – all grades
   - Math and Science – upper grades

3. Balance between acquisition of knowledge/skills & sense of judgment /critical thinking

4. Collaboration among schools, families and communities

Source: MEXT (2011)
3. Surveys on the 21st century skills:

- Used mixed methods (questionnaire survey & interviews)
- July – October 2013 (on going)

**Questionnaire categories**

- Survey responses: 12
- Interviews: 18

**ERI-Net categories**

- Policy review, curriculum framework, achievements and challenges

**Newly added**

Role of teachers, changes in pedagogy, clarity of descriptions of non-cognitive aspects in the 2008 New Courses of Study, changes in students’ attitude, desirable support from the government

**Open-ended questions**

Expectations of the 2008 New Courses of Study
## Preliminary findings

<table>
<thead>
<tr>
<th>#</th>
<th>Topic</th>
<th>Experts</th>
<th>Teachers</th>
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</table>
| 5  | Areas of needs                             | • Research on 21st century skill models  
• Research on pedagogy  
• Gap between policy and implementation                                                                                                             | • Financial assistance  
• Support for teacher training  
• Guidelines and teaching materials                                                                                                           |
| 6  | What is expected from 2008 New Courses of Study | • Self-reliance  
• Collaboration with others                                                                                                                                                                        | • Self-reliance  
• Creativity  
• Individual unique activities                                                                                                               |
| 7  | Others                                     | • Need to review entrance examination system for implementation of non-cognitive skill  
• Support through teaching practices  
• Providing lectures and practical training                                                                                                        | • Pay attention to students’ self-reliance and unique ideas  
• Active school based training  
• Strong tie with community  
• Strong teachers’ motivation  
• Teachers recognize positive changes on students                                                                                                    |
Rational behind policy towards non-cognitive skill integration

- Increased international competition
- Meeting social demand
- Decreased students’ motivation and sense of independence
- Declining student’s learning achievement
- Response to employers' demand to increase "employability" of students
- Boosting economic development
- Low interpersonal skills due to diluted relationship with others
- Decline in students’ physical strength
- Excessive pressure on students to achieve academic excellence

Teachers (N=14) vs. Education Specialist (N=12)
Skills and Competencies promoted in the 2008 New Courses of Study

Important skills and competencies for students

Problem-solving
Communication
Reflective thinking
Collaboration
Self-motivation
Application skills
Resourcefulness
Working with others
Tolerance
Creativity
Ability to resolve conflicts
Civic/political participation
Reasoned decision-making
Presentation skills
Organization skills
Media/information literacy
Career planning
Commitment
Intercultural understanding
Digital literacy
Planning
Respect for the environment
Self-discipline
Compassion
Entrepreneurship
Enthusiasm
Leadership
Perseverance
Awareness and respect for diversity
Openness
Sincerely
Japanese version of the 21st century competency

Issues to be considered for implementation at institutional level

1. Curriculum design in line with development stage of the students
2. Curriculum design principle reflecting subject contents
3. Planning student evaluation
4. Reflecting into teacher training
5. Innovative Approach: 96 MEXT Pilot Schools
Exercise 6 skills and competencies

- Self-reliance
- Creativity
- Cooperative attitude
- Ability to interact with others through language
- Intrapersonal ability
- Self-discipline

(Otemachi Primary School, 2013)
Case Study: Otemachi Primary School Educational Structure

<2011>

Life / General Education

Academic Subjects
- Language
- Social science
- Math
- Science
- Music
- Art
- House economics
- Physical Education
- Foreign language

Special Activities

Reflective notes

<since 2013>

Life / General Education

Transform into six fields + focusing on competencies

Math and Science

Languages

Creativity and Communication

Health

Human relationship

Learning Time
Math and Science

Let’s find a rule of pendulum (Grade 5)

Ability to utilize information

Develop an attitude for problem solving with logical thinking

(Otemachi Primary School, 2013)
Creativity

Let’s send a message of ‘Smile’ (Grade 6)

Cultivate creativity with refining sensitivity

(Otemachi Primary School, 2013)
Learning Time

Keep diary
Talk with their homeroom teacher
Receive feedback from parents

Give an important meaning to learning

(Otemachi Primary School, 2013)
Summarize it on the ‘Essay sheet’

Categorize and organize them on the “Networking sheet”

Read over the stickers

Keep a record on “Learning Stickers”

Link each activity and enhance learning

(Onemachi Primary School, 2013)
Participatory evaluation

6 skills

- Ability to inquire
- Creativity
- Communication skills
- Ability to utilize information
- Self-determination
- Ability to live together

Participatory Evaluation

- Detailed assessment criteria for each grade
- Shared assessment information and its criteria with parents

Teachers

Students

Parents
Zest for Living

Well-rounded character

Self-esteem, self-discipline (1)
Relationship with others (2)
Social participation (3)

Solid Academic Prowess

Japanese
Sociology
Math
Science
Integrated Study
Music
Art
Domestic science & Technology
Foreign Language

Independence and self-reliance for individual life

1. Self-understanding/Self-responsibility
2. Promotion of health
3. Decision-making skill
4. Life planning skill

Relationship with others in school and family

Responsibility
6. Sensitivity/Expression
7. Establishing good relationship with others

Relationship with the society for career development and living with the community

8. Responsibility, rights and work
9. Understanding of society, culture and natural environment
10. Application of language and information
11. Application of knowledge and technology
12. Problem-Identification and solving skill

Healthy body

Ability to improve one’s life by keeping and promoting health (2) (5) (11)

Source: Framework of curriculum contents and objectives for Zest for Living
Answers to Research Question (1)

What is your definition and application of non-cognitive/transversal/21st century skills in the context of your country/region/study?

- The principles underlying “Zest for Living” is considered current interpretation of “non-cognitive skills” in Japanese education policy, which has been identified important under the global and knowledge-based society.

- “Zest for Living” means well-balanced competences of “Chi-Toku-Tai” (solid academic prowess, well-rounded character and healthy body) in order to live in a fast-changing society.
Answers to Research Question (2)

How do you identify the emerging trends, achievements and challenges (if any) in the context of your country/region/study?

- Societal changes, lowering students motivation are considered as main factors to shift towards integration of non-cognitive skills into education policy
- Amendment to Basic Act on Education (2006) added self-reliance, civic responsibility and enhancement of individual unique abilities
- Increase in verbal activities and group exercise are noticeable under the 2008 New Courses of Study
- Importance of collaboration among schools, parents and community is further emphasized. The number of community schools increased year by year
- Insufficient teacher training opportunity is a bottle neck for smooth implementation of the 2008 New Courses of Study
Answers to Research Question (3)

What is the areas to be covered in the future study (needs)?

- More research and evidence on 21st century skills, pedagogy, student evaluation and curriculum evaluation are required
- Development of guidelines and teaching materials
What does your study suggest towards education policy (in your country/region)?

- Need to identify required non-cognitive skills to be measured and their measurement criteria
- Need for carefully analyzing entrance examination system (lower to upper secondary school, higher education)
- How to fill the gap between policies (New Courses of Study) and practices (class room teaching)
- Need for awareness and collaboration of the stakeholders to support education policies integrating non-cognitive skills
Thank you very much

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Annex
The Second Basic Plan for the Promotion of Education
(4 Policy directions & 8 Missions)

1. Development of social competencies for survival
   - Nurturing “Zest for Living”
   - Exploring to the questions unanswered
   - Acquiring “self-reliance”, “cooperative and creative” abilities
   - Grow as independent citizens

2. Development of human resources for a brighter future
   - Human resources with new values, contributing to global society

3. Establishment of learning safety net
   - Ensuring learning opportunities
   - Ensuring safe and secure education & research environment

4. Establishment of vibrant communities based on strongly-tied society
   - Community involvement with mutual assistance
Framework of curriculum contents and objectives for Zest for Living (2005)

1. Independence and autonomy for individual life
   1. Self-understanding and self responsibility
   2. Promotion of health
   3. Decision-making skill
   4. Life planning skill

2. Relationship with others in school and family
   5. Collaboration and responsibility
   6. Sensitivity / Expression
   7. Establishing good relationship with others

3. Relationship with the society for career and living environment
   8. Responsibility, right and work
   9. Understanding of society, culture and natural environment
   10. Application of language and information
   11. Application of knowledge and technology
   12. Problem-identification and solving skill
The Community School has a "Board of school administration" which is composed of appointed parents and community representatives. The board has a certain level of authority and responsibility to review basic policy of school management.

**Characteristics:**

- To reflect voice of community into school management, educational goals, and assessment.
- Create basic school management policy and activities.

**Principle:**

- Create basic school management policy and activities.

**Number of Community School (April, 2013)**

- 17
- 53
- 197
- 341
- 475
- 629
- 789
- 1,183
- 1,570
- 1,570 schools

**Number of Community School (2016)**

- 3,000 schools
Let’s have a Haiku poem class
(Grade 2)

Communication skill

Develop an attitude for building relationship with others and expressing ideas by own words

(Otemachi Primary School, 2013)
Life / General Education

Morning market group
(Grade 3)

Ability to inquire

Develop an attitude to create a better life by own initiative

(Otemachi Primary School, 2013)
Health Education

Develop an attitude of maintaining physically and mentally healthy life

(Otemachi Primary School, 2013)
Human Relationship

Let’s go for a field trip (All grades)

Attitude for living together

Nurture rich mind through interaction with others

(Otemachi Primary School, 2013)
Re-examine oneself and reflect it to further learning

(Onemachi Primary School, 2013)
Summary of Findings

1. Difficulty in measuring non-cognitive skills
2. Need for carefully analyzing entrance examination system
3. Need for supporting teachers’ skill development
4. Need for awareness raising of stakeholders to support education policies integrating non-cognitive skills