INTEGRATING TRANSVERSAL COMPETENCIES IN EDUCATION POLICY AND PRACTICE (PHASE III)

Country Case Study: JAPAN

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Outline

1. Background
2. Research Design
3. Policies and Practices for Professional Development of Teachers: Case of Akita
4. Professional Development Practice at School Level
5. Teachers’ Perception on Professional Development in Akita
6. Education for Increasingly Globalized World
7. Achievements and Challenges
1. Background: Findings from Previous Study
   1.1. Phase I (Reviewed “the 2008 New Courses of Study”)

1. Principle of “Zest for Living”
   ◆ Verbal activities across all academic subjects
   ◆ Fostering abilities to “think, express and make decisions

2. Promotion of Transversal Competencies in the 2008 Courses of Study
   ◆ Emphasis on ability to think, ability for reasoned decision-making and ability to express oneself, especially though verbal activities
   ◆ Establishing partnership with local community for more experience-based learning
Zest for Living

Solid academic Prowess
- Basic Knowledge
- Learn & think themselves

Solid academic Prowess
- Need for strengthening ability to “think”, “express” and “make decisions”

Enhancement of verbal activities in the 2008 New Course of Study

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

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

Cooperate with others

Mental Health

Empathy

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

Source: MEXT (2011)
Enhancement of verbal activities (1)

As a tool to achieve objectives of each subject

Enhancing Verbal Activities

Japanese
Ensuring basic ability of Japanese language as well as experiencing beauty of the language. Nurturing abilities to utilise language such as record, summary, explanation, dissertation and debate according to students’ stage of development
Enhancement of verbal activities (2)

**Japanese**
Express experiences and learn how to persuade others

**Science**
More experiments related to daily activities and present in groups

**Social Science**
Use current affairs, and discuss with reasons

**General Studies**
Inviting community worker for discussion
1. Prefectural and School policies on transversal competencies
   - MEXT transversal competencies promoting policies are well reflected in local policies
   - Interactive teaching method "Volleyball lesson"

2. Teaching practice to promote transversal competencies
   - Inquiry-based lessons
     1. Standardized lesson planning
     2. Incorporating diverse verbal activities
     3. Strengthening interrelations of learning

1.2. Phase II (Policies and Practice in Akita)
1. Background: Findings from Previous Study
1.2. Phase II (Policies and Practice in Akita)

Standardized lesson planning

<table>
<thead>
<tr>
<th>1. Three components of Lesson: Goal, Development, and Reflection</th>
<th>2. Blackboard utilization</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Image" /></td>
<td><img src="image2.png" alt="Image" /></td>
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<td><img src="image5.png" alt="Image" /></td>
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<td><img src="image8.png" alt="Image" /></td>
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<tr>
<td><img src="image9.png" alt="Image" /></td>
<td><img src="image10.png" alt="Image" /></td>
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1. Background: Findings from Previous Study

1.2. Phase II (Policies and Practice in Akita)

Incorporating diverse verbal activities

<table>
<thead>
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<th>2. Teachers as a facilitator</th>
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1. Background: Findings from Previous Study

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1.2. Phase II (Policies and Practice in Akita)

Strengthening interrelations of learning

<table>
<thead>
<tr>
<th>1. Environment to enhance Learning</th>
<th>2. Cross-subject learning Approach</th>
</tr>
</thead>
</table>

- Science
- Social science
- Career Education
- Nature
- Culture
- History
2. Research Design (Phase III)

• Research Questions
  o How are teachers in Japan, prepared for their teaching skills, including facilitating transversal competencies learning?
  o How are teachers perceiving the impact of globalization in their educational practices at school level?

• Data Collections
  o Policy document analysis
  o School observations
  o Interviews
  o Questionnaire survey

• Akita Prefecture
  o 450km North of Tokyo, 11,363.30km², Pollution; 1,023,151 Education budget: 18.5%
  o Top ranking in the National Achievement Examination since 2007
  o Akita Yuzawa City, Higashi Naruse Village

1) National, Local and School Policies
2) Teacher training Practice
3) Teachers’ perceptions

Source: http://wikitravel.org/upload/shared//4/4c/Japan_akita_map_small.png
3.1. Findings: Professional Development Policies in National Level

1. Responsibility and obligation; The Special Regulations Concerning Educational Personnel (1949)

**Article 21:** Must continuously devote themselves to research and pursue self-development

**Article 22:** Teacher training by appointed authorities is compulsory

**Article 23:** “beginning teachers’ training” — administrators have a responsibility to train newly hired teachers for one year.

**Article 24:** “10 years training” — administrators have a responsibility to conduct training to the teachers who completed their 10 years of teaching

**Article 25:** Teacher training must be planned & implemented systematically, reflecting teachers’ experience

2. National level teacher training

- Training for core teachers
- Training for teacher trainers
- Mandatory teacher trainings
Four basic competencies (Akita University, School of education)

1. Teachers who **have sense of responsibility to develop and support local education**, 
2. Teachers who understand the principle of **pedagogy and have basic practical skills** for teaching, 
3. Teachers who contribute **to create healthy environments** by supporting and understanding children, 
4. Teachers who **build good relationships** between children, parents and local communities

Akita Prefecture Teacher Training System (1958-)

Designed based on individual professional stage

- Reflecting the 2006 amended education laws, including “review of the 2008 New Courses of Study”
- Structure
### Akita Prefecture Teacher Training System (2006-)

<table>
<thead>
<tr>
<th>Training Theme</th>
<th>Appropriate daily Trainings that enhance practical teaching skills</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stage</strong></td>
<td><strong>Novice Stage</strong></td>
</tr>
<tr>
<td><strong>Goal</strong></td>
<td>Build a basic quality as a teacher and acquire expertise</td>
</tr>
<tr>
<td><strong>Position-based</strong></td>
<td><strong>Basic Training</strong></td>
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</tr>
<tr>
<td><strong>Position-based</strong></td>
<td><strong>Basic Training</strong></td>
</tr>
</tbody>
</table>

**3.2. Findings: Professional Development Policies in Local Level**

- **Akita Prefecture Policies**
  
  - Designed based on one’s professional stage
  - Reflecting the 2006 amended education laws, including “review of the 2008 New Courses of Study”

**Source:** (Akita Board of Education, 2011a) p.7
3.2. Findings: Professional Development Policies in Local Level

3.2.2. Municipality Policies

- Yuzawa City
  - Six strategies to improve teacher’s quality and competency
3.2. Findings: Professional Development Policies in Local Level

3.2.2. Municipality Policies (2)

Committee of Education Research Institute (CERI), Chikara-mizu no Kai

Academic Supervisors

Policy Recommendation
Training Programs

Policy Implementation
Training Programs

Board of Education

CERI (Chikara mizu no kai)

Teachers

Local School
3.2. Findings: Professional Development Policies in Local Level

3.2.2. Municipality Policies

- Yuzawa City
  - Six strategies to improve teacher’s quality and competency

- Higashi Naruse Village
  - Collaborative Education between Primary and Junior high school

Common Characteristics

1. Educational collaborations between primary and junior school
2. Emphasis on the school-based teacher training
3. Strong school leadership for effective professional development
4. Good relationship between the board of education and local schools
3.2. Findings: Professional Development Policies in Local Level

3.2.2. School policies

1. **Educational collaboration** between primary and junior high school scheme contributes to professional development strategies

   - To learn different skills from the counter partners
   - To identify teacher’s standpoint in the nine years continuous education
   - To share the common educational goals
   - To form subject based study groups

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**Educational collaboration**
3.2. Findings: Professional Development Policies in Local Level

1. Educational collaboration between primary and junior high school schemes contributes to professional development strategies.

2. School-based teacher training activities are implemented based on well-thought-out annual plans.

3. School leaders play important roles in informal professional development.

   - Providing guidance and feedback through daily conversations
   - Showing a model by acting
   - Motivating teachers and making aware of sense of responsibility
   - Creating an appropriate environment for professional development
   - Bridging gaps between theory and practice
   - Creating an appropriate environment for professional development
4. Findings: Professional Development in Practice
4.4. School :Professional Development Practice at School Level

Summary of Open Lessons and Consultative Meetings Observed

| Yuzawa Higashi Primary School (2015/06/26) |  |
|---|---|---|---|---|
| Subject | Grade | No. of Students | Topic | No. of participants |
| Math | 6 | 29 | Division of Fraction | 13 |
| Japanese | 2 | 30 | Writing a book report | 15 |
| Summary meeting | — | — | — | 27 |

| Yuzawa Kita Junior High School (2015/06/25) |  |
|---|---|---|---|---|
| Subject | Grade | No. of Students | Topic | No. of participants |
| Physics | 3 | 27 | Work and Energy | 13 |
| Home Economics | 2 | 26 | Local food for daily diet | 15 |
4. Findings: Professional Development in Practice

Process of Lesson Study of School Based Teacher Training
4. Findings: Professional Development in Practice

Process of Lesson Study of School Based Teacher Training
4. Findings: Professional Development in Practice

Process of Lesson Study of School Based Teacher Training
4. Findings: Professional Development in Practice

Process of Lesson Study of School Based Teacher Training
4. Findings: Professional Development in Practice

1. Open lesson documents serve as an important source of information for lesson study.

2. Open discussion and lectures by academic supervisors are well combined in consultative meetings.

3. Lesson study contribute in creating collaborative learning environment.

4. Diverse background of academic supervisors helps implement quality training sessions.

5. Goals of lesson study are well shared among teachers, school principals and academic supervisors.
5. Teachers’ Perception on Professional Development in Akita

5.1 Data collection

- Used mixed methods (interview & questionnaire)
- June to August 2015
- Respondents

School Principals

School Vice Principals

Head of municipal Board of Education

Officials of Akita Bureau of Education

School Principals/ Teachers

15 interviews

187 survey responses

Questionnaire Overview

- 32 questions
- **Questionnaire Categories**:
  1) Background Information
  2) Teachers preparedness in facilitating transversal competencies in classroom
  3) Professional development for teachers to facilitate transversal competencies learning
  4) Transversal competencies in increasingly inter-connected world
5. Teachers’ Perception on Professional Development in Akita

5.1. Teachers’ preparedness (1)

- Skills and competencies important for teachers

- Interpersonal skills
  - Communication skills
  - Facilitation skills
  - Organizational skills

- Basic quality of teachers
  - Openness
  - Passion/love for teaching
  - Tolerance
5. Teachers’ Perception on Professional Development in Akita

5.1. Teachers’ preparedness (2)

Teachers consider that they obtained various kinds of skills

Fewer teachers feel they are equipped with facilitating skills
5. Teachers’ Perception on Professional Development in Akita

5.2. Planning and Implementation (1)

- **Available** professional development opportunities

<table>
<thead>
<tr>
<th>Professional Development Opportunity</th>
<th>Percentage</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>School-wide training</td>
<td>100%</td>
<td>179</td>
</tr>
<tr>
<td>Lesson study</td>
<td>88%</td>
<td>160</td>
</tr>
<tr>
<td>Trainings by national and local governments</td>
<td>80%</td>
<td>148</td>
</tr>
<tr>
<td>Visiting other schools to observe and learn</td>
<td>64%</td>
<td>121</td>
</tr>
<tr>
<td>Exchanging ideas with colleagues</td>
<td>58%</td>
<td>104</td>
</tr>
<tr>
<td>Self-directed professional development</td>
<td>41%</td>
<td>101</td>
</tr>
<tr>
<td>Mentoring</td>
<td>27%</td>
<td>84</td>
</tr>
<tr>
<td>School-based trainings: trainings by subject</td>
<td>25%</td>
<td>77</td>
</tr>
<tr>
<td>School-based trainings: trainings by grade</td>
<td>10%</td>
<td>37</td>
</tr>
<tr>
<td>Opportunity and funding assistance to enroll in university to earn units/degree</td>
<td>4%</td>
<td>12</td>
</tr>
<tr>
<td>Others</td>
<td>0%</td>
<td>3</td>
</tr>
</tbody>
</table>

No professional development opportunity is available.
5. Teachers’ Perception on Professional Development in Akita

5.2. Planning and Implementation (2)

- Perceived **effectiveness** of professional development opportunities

- **Top 3 available opportunities**

  1. **Lesson study**
  2. **School-wide trainings**
  3. **Mentoring**

Other opportunities:
- **Trainings by national and local governments**
- **Exchanging ideas with colleagues**
- **School-based trainings by subject**
- **Visiting other schools to observe and learn**
- **Self-directed professional development (other than listed above)**
- **School-based trainings: trainings by grade**
- **Opportunity and funding assistance to enroll in university to earn units/degree**

Legend:
- Very much
- To some extent
- Very little
- Not at all
- Do not know
5. Teachers’ Perception on Professional Development in Akita

5.2. Planning and Implementation (3)

Frequency of participating in self-directed learning opportunities

<table>
<thead>
<tr>
<th>Activity</th>
<th>Very often</th>
<th>Sometimes</th>
<th>Not much</th>
<th>Not at all</th>
<th>Do not know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participating in school-level study group such as lesson study</td>
<td>72</td>
<td>102</td>
<td>62</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Seeking advice from senior teachers and colleagues</td>
<td>53</td>
<td>108</td>
<td>211</td>
<td>1%</td>
<td></td>
</tr>
<tr>
<td>Using information through internet and other medias to update oneself of current trends and researches in education</td>
<td>44</td>
<td>110</td>
<td>291</td>
<td>1%</td>
<td></td>
</tr>
<tr>
<td>Reading related magazines and books</td>
<td>41</td>
<td>111</td>
<td>274</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>Seeking advice from managements</td>
<td>36</td>
<td>105</td>
<td>343</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>Exchanging information with teachers in other schools</td>
<td>18</td>
<td>109</td>
<td>497</td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td>Participating in training, seminar and academic conferences outside of school</td>
<td>13</td>
<td>119</td>
<td>502</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>Enrolling in universities to earn units/degree</td>
<td>17</td>
<td>48</td>
<td>113</td>
<td>7%</td>
<td></td>
</tr>
</tbody>
</table>
5. Teachers’ Perception on Professional Development in Akita

5.3. Expected support for professional development (1)

- Training needs of teachers

- Training that includes focused discussion based on detailed lesson analysis

- Training by expert to learn specialized knowledge

- Training with various kinds of experienced-based methods (e.g. role playing, case study)

- Exchange ideas with senior teachers and colleagues on a daily basis

- Others

![Chart showing the distribution of training needs]

- (135) Training that includes focused discussion based on detailed lesson analysis
- (108) Training by expert to learn specialized knowledge
- (106) Training with various kinds of experienced-based methods (e.g. role playing, case study)
- (93) Exchange ideas with senior teachers and colleagues on a daily basis
- (1) Others
6. Education for Increasingly Globalized World

6.1. National level Policy

- National education policy for preparing students in increasingly globalized world

- **Strategy for fostering globally competent human resource (MEXT, 2011)**
  - Placing emphasis on developing basic academic knowledge & skills, physical fitness and communication skills at primary and secondary school level
  - 1) Increasing practical use of English in English Education, 2) Promoting studying abroad at high-school level 3) Improving quality and capability of teachers

- **The 2008 Courses of Study (MEXT, 2011)**
  - Including the emphasis on preparing learners to increasingly interconnected society
  - Aiming for developing Japanese citizen with norm and attitude as member of international community, respecting traditions and culture of Japan
6. Education for Increasingly Globalized World

6.2. Teachers’ perception (1)

- Level of the awareness of globalization in the 2008 Courses of study/school policies

To what extent are you aware of globalization-sensitive education in the 2008 Courses of Study/School Policies?

**The 2008 Courses of Study**

- Very much: 75%
- To some extent: 15%
- Very little: 7%
- Not at all: 2%
- Do not know: 1%

**School Policies**

- Very much: 59%
- To some extent: 24%
- Very little: 1%
- Not at all: 9%
- Do not know: 7%
6. Education for Increasingly Globalized World

6.2. Teachers’ Perception (2)

- Students’ important skills and competencies in relation to interconnected world

<table>
<thead>
<tr>
<th>Skill</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Communication skills</td>
<td>70%</td>
</tr>
<tr>
<td>Ability to obtain and analyse information</td>
<td></td>
</tr>
<tr>
<td>Resourcefulness</td>
<td></td>
</tr>
<tr>
<td>Reasoned-decision making</td>
<td></td>
</tr>
<tr>
<td>Collaboration</td>
<td></td>
</tr>
<tr>
<td>Creativity</td>
<td></td>
</tr>
<tr>
<td>Sociability</td>
<td></td>
</tr>
<tr>
<td>Compassion</td>
<td></td>
</tr>
<tr>
<td>Application skills</td>
<td></td>
</tr>
<tr>
<td>Teamwork</td>
<td></td>
</tr>
<tr>
<td>Empathy</td>
<td></td>
</tr>
<tr>
<td>Collegiality</td>
<td></td>
</tr>
<tr>
<td>Ability to critically evaluate information</td>
<td></td>
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<tr>
<td>Ethical use of ICT</td>
<td></td>
</tr>
<tr>
<td>Organizational skills</td>
<td></td>
</tr>
<tr>
<td>Reflective thinking</td>
<td></td>
</tr>
<tr>
<td>Entrepreneurship</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td></td>
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</tbody>
</table>

Note: The numbers in parentheses indicate the number of responses.
## 6. Education for Increasingly Globalized World

### 6.2. Perception

#### Examples of educational activities related to globalization

<table>
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<tr>
<th>Educational activities</th>
<th>Description</th>
<th>No. of cases</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>English education/Period of Integrated Studies</strong></td>
<td>lessons with international language teachers (ALT: assistant language teachers) Learning international cooperation through the period of integrated studies</td>
<td>8</td>
</tr>
<tr>
<td><strong>International exchange events</strong></td>
<td>Communication with partner schools outside Japan international camp with international students of Akita International University</td>
<td>7</td>
</tr>
<tr>
<td><strong>Furusato (hometown) education</strong></td>
<td>inviting local people as lecture to learn various aspects of their hometown - Experiencing local events with local people - Short field trip to discover hometown</td>
<td>7</td>
</tr>
<tr>
<td><strong>Career education</strong></td>
<td>Workplace experience - Workshop with people with various kinds of occupations</td>
<td>6</td>
</tr>
<tr>
<td><strong>Education activities to develop students’ transversal competencies</strong></td>
<td>School-wide poster session - Increasing exchanging ideas among students on daily basis - Increasing hands on experience in daily lessons</td>
<td>4</td>
</tr>
<tr>
<td><strong>Volunteer activities</strong></td>
<td>Lecture about volunteerism - Experience volunteer activity with elders and people with disability</td>
<td>4</td>
</tr>
<tr>
<td><strong>School-wide events</strong></td>
<td>Annual sports fest - School trip - School events in general</td>
<td>3</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>Lecture series for better living Lectures inviting people from outside</td>
<td>3</td>
</tr>
</tbody>
</table>
Achievements and Challenges (1)

1) **School-based training** is well recognized as the **core of teachers’ professional development** in Akita.

2) **Informal** teacher training plays an important role in teachers’ professional development

3) “**Collaborative education** between primary and junior high school” scheme creates positive environment for effective teacher training programs

4) Teachers are engaged in **self-directed learning** for improving own abilities and for developing specialized knowledge

5) **School-based training** such as lesson study contributes in creating **collaborative learning community** at school

6) Teacher training programs in Akita are catered to meet teachers’ needs in creating **comprehensive professional development**
1) Teachers expect more support from governments, in preparing themselves to promote transversal skills and competencies among students.

2) Teachers are not accustomed to criticizing teaching practices of colleague teachers.

3) There is a gap between skills and competencies teachers perceive important to be equipped and those they believe to have acquired.
Thank you very much

Tokyo Institute of Technology

Shinobu Yume Yamaguchi
Naoko Asano Enomoto
Yukiko Yamamoto
Akina Ueno

GSIC