

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

## *Country Case Study: JAPAN*

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ERI-net annual meeting: 22-24 February, 2016  
Tokyo, Japan

# 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 through verbal activities
- ◆ Establishing partnership with local community for more experience-based learning

Zest for Living

Solid academic Prowess

Basic Knowledge  
Learn & think themselves

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

Enhancement of verbal activities  
in the 2008 New Course of Study

Cooperate with others  
Empathy

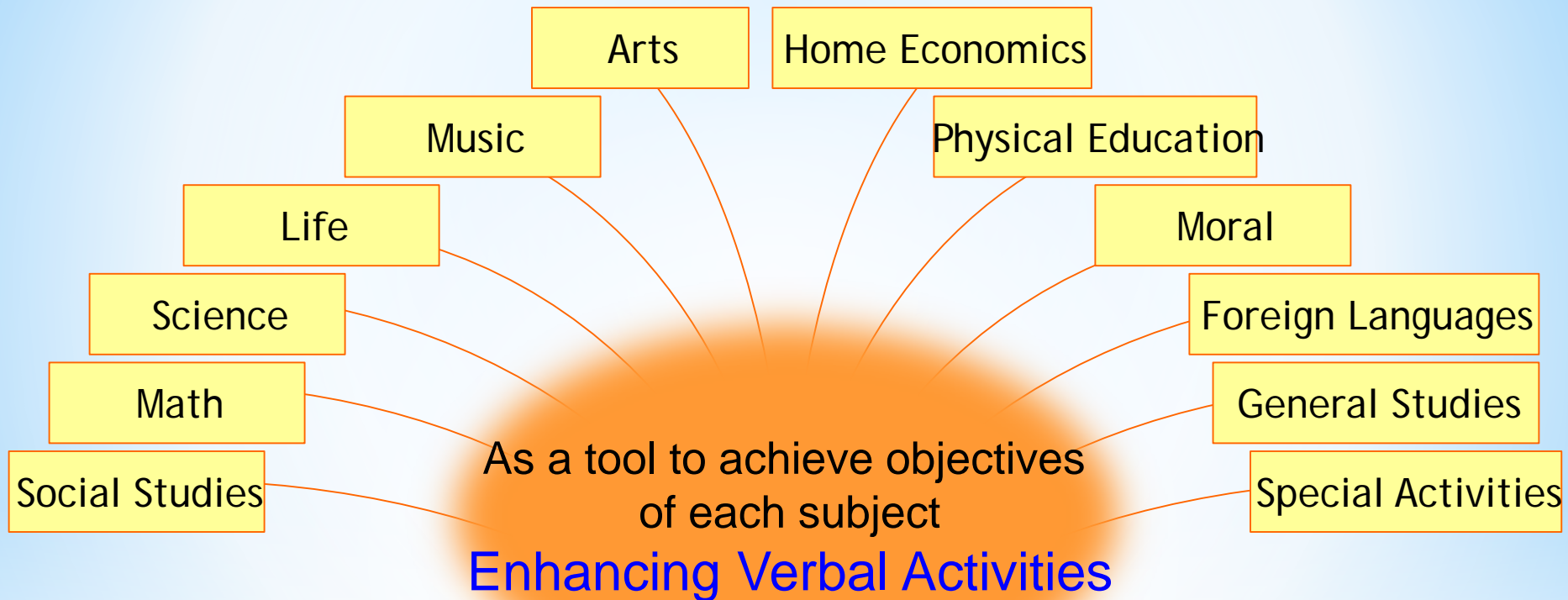
Balance between acquisition of knowledge/skills & sense of judgment / critical thinking

Mental Health

Source: MEXT (2011)

Need for strengthening ability to "think", "express" and "make decisions"

# Enhancement of verbal activities (1)



## 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)

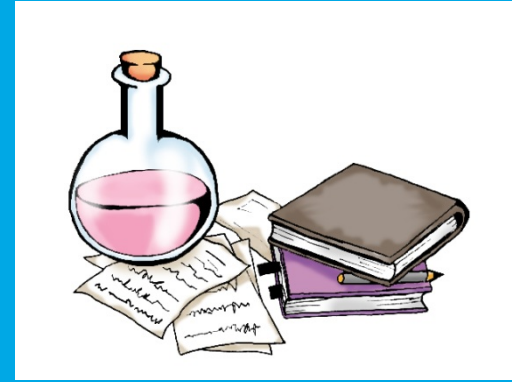
## Japanese

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



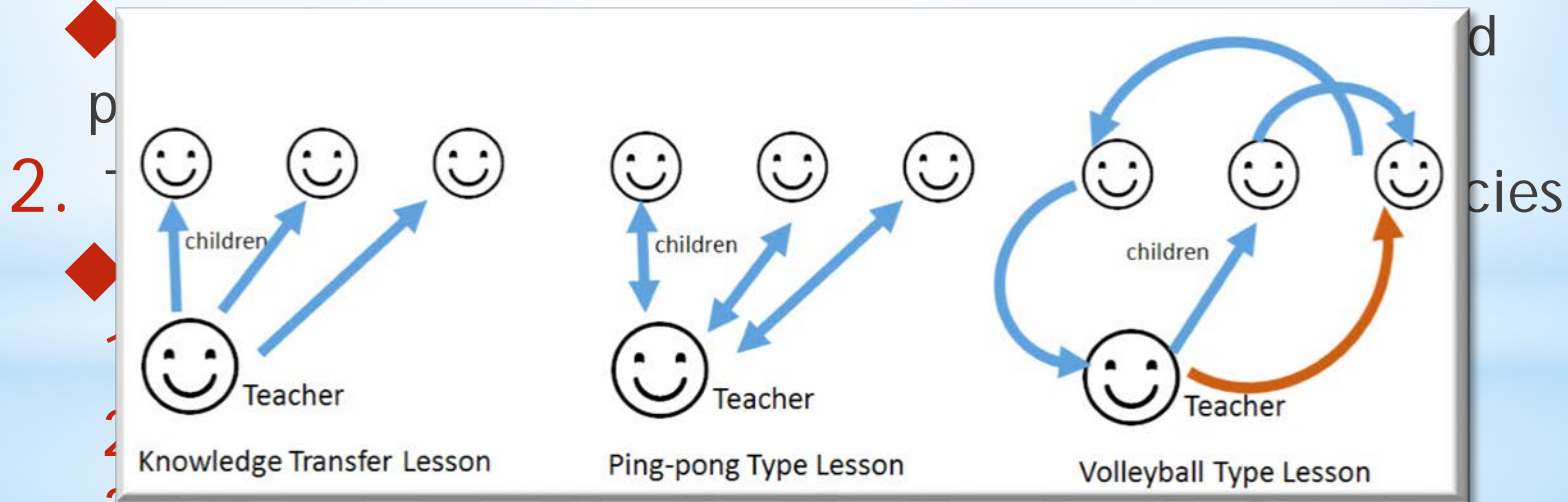
# 1. Background: Findings from Previous Study

## 1.2. Phase II (Policies and Practice in Akita)

### 1. Prefectural and School policies on transversal competencies

◆ MEXT transversal competencies promoting policies are well reflected in local policies

◆ Interactive teaching method **“Volleyball lesson”**



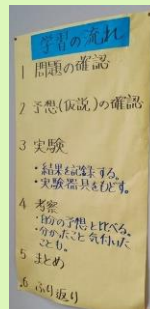
### 3. Strengthening interrelations of learning

# 1. Background: Findings from Previous Study

## 1.2. Phase II (Policies and Practice in Akita)

### Standardized lesson planning

#### 1. Three components of Lesson: Goal, Development, and Reflection



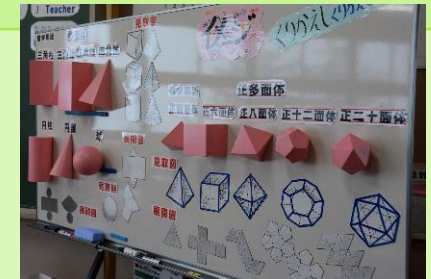
#### 2. Blackboard utilization



#### 3. Notebook utilization



#### 4. Innovative teaching Materials/Using ICT for Enhancing Quality of Learning



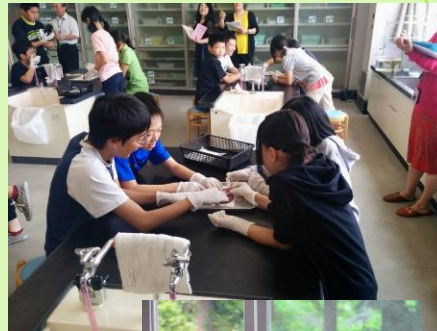


# 1. Background: Findings from Previous Study

## 1.2. Phase II (Policies and Practice in Akita)

### Incorporating diverse verbal activities

#### 1. Combination of individual activity and group work



#### 2. Teachers as a facilitator



# 1. Background: Findings from Previous Study

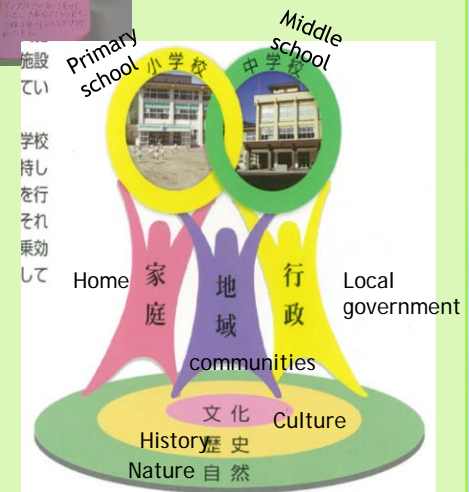
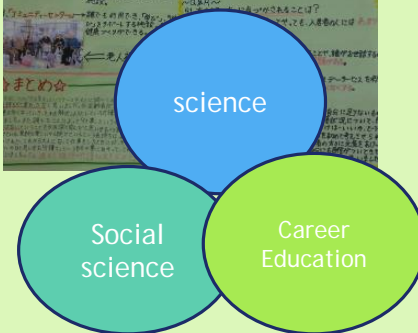
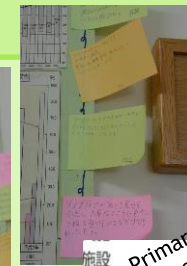
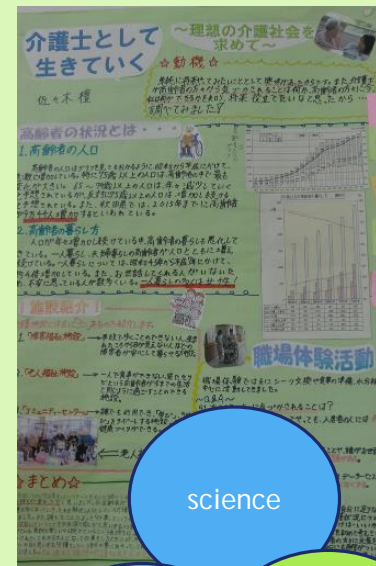
## 1.2. Phase II (Policies and Practice in Akita)

### Strengthening interrelations of learning

#### 1. Environment to enhance Learning



#### 2. Cross-subject learning Approach



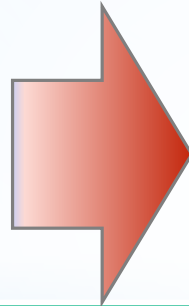
## 2. Research Design (Phase III)

### • Research Questions

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

### • Data Collections

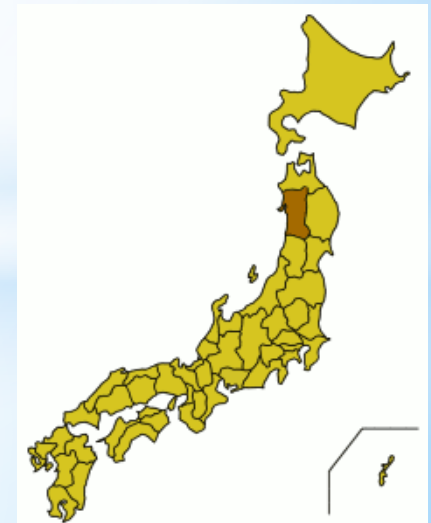
- Policy document analysis
- School observations
- Interviews
- Questionnaire survey



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

### • Akita Prefecture

- 450km North of Tokyo, 11,363.30km<sup>2</sup>, Pollution; 1,023,151 Education budget:18.5%
- Top ranking in the National Achievement Examination since 2007
- Akita Yuzawa City, Higashi Naruse Village





### 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



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

### 3.2.1. Akita Prefecture Policies

- 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

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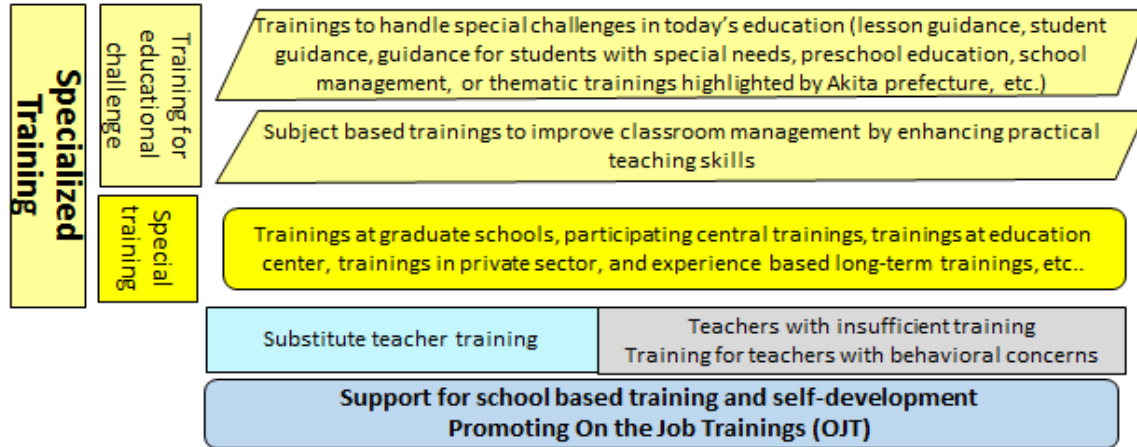
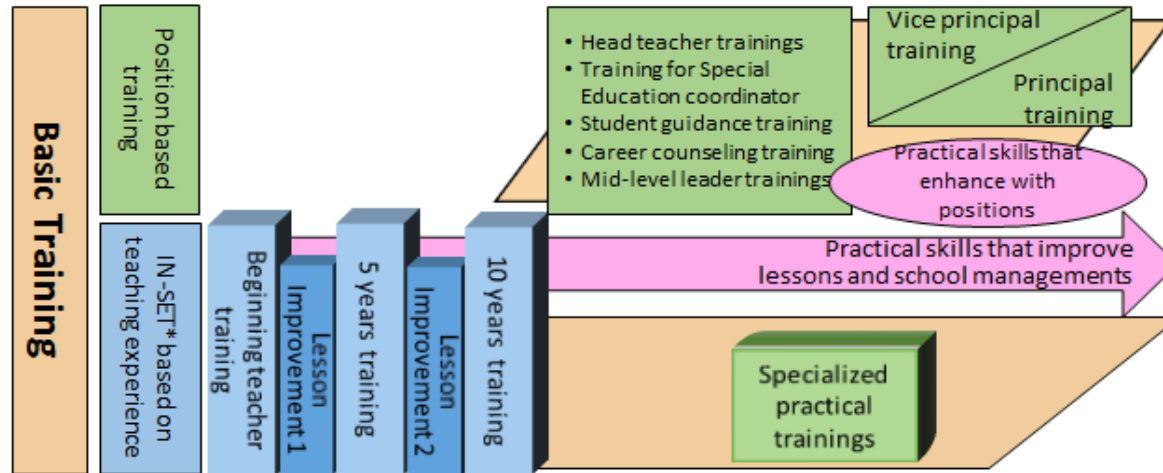
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**Akita Prefecture Teacher Training System (2006-)**

Training Theme	Appropriate daily Trainings that enhance practical teaching skills		
Stage	Novice Stage	Middle Stage	Management Stage
Goal	Build a basic quality as a teacher and acquire expertise	Develop the quality of the mid-level leader and enhance their expertise	Enhance a quality as a leader and manager as well as deepen their expertise



\*IN-SET: In-service training

Training for renewal of a teaching certificate

Four

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

### 3.2.2. Municipality Policies

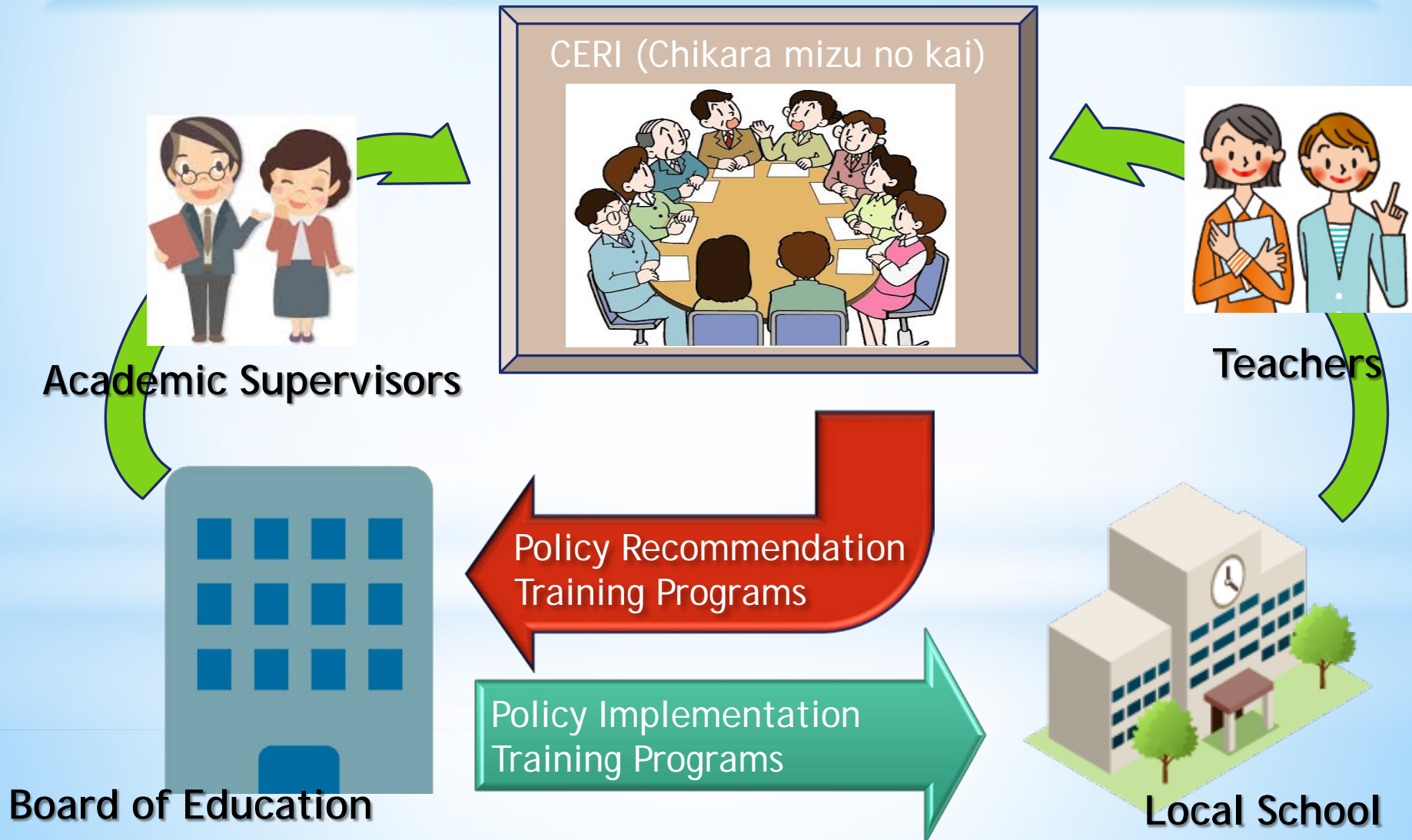
#### □ Yuzawa City

- ◆ 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





## 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

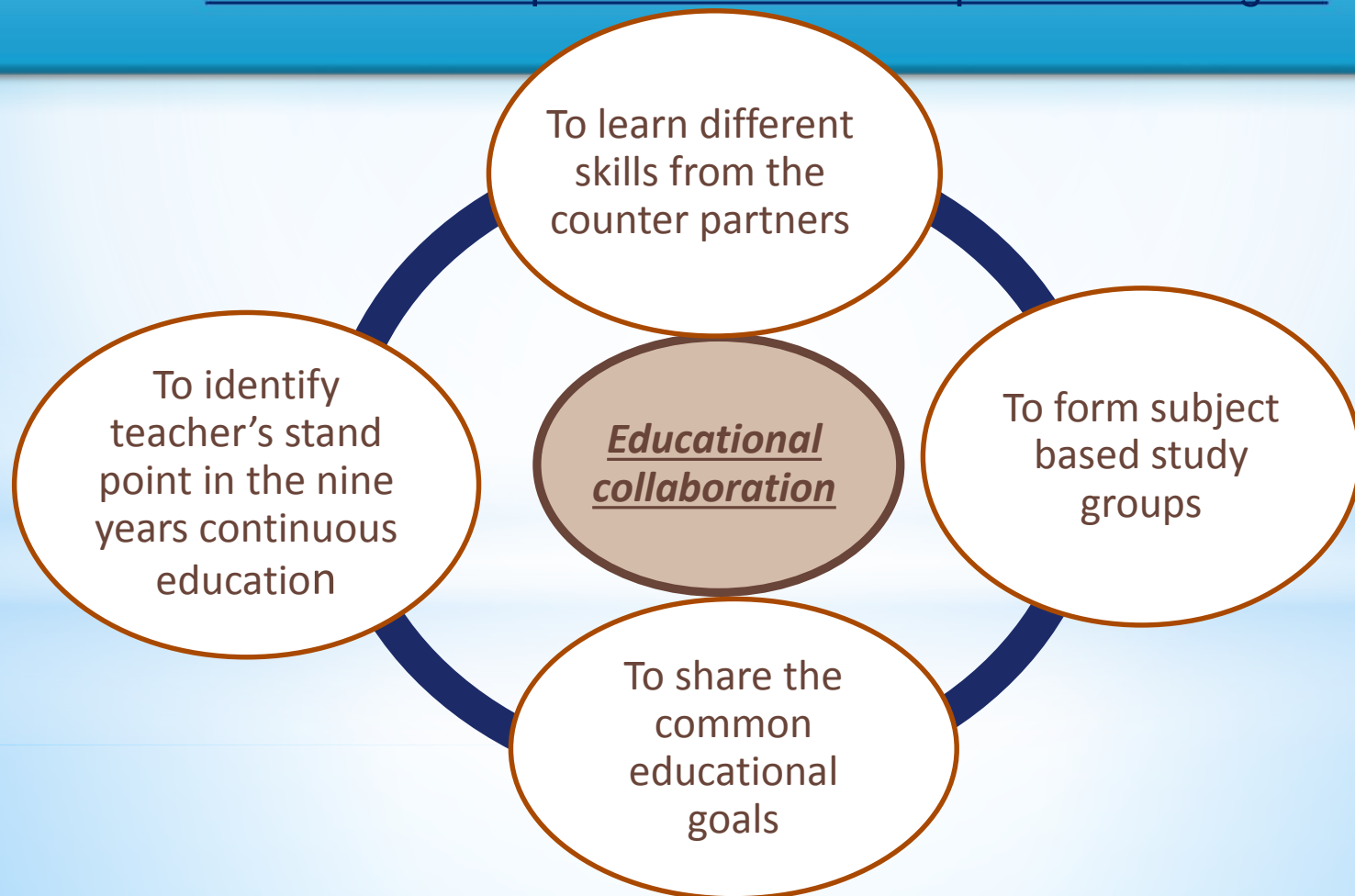
#### □ Common Characteristics

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

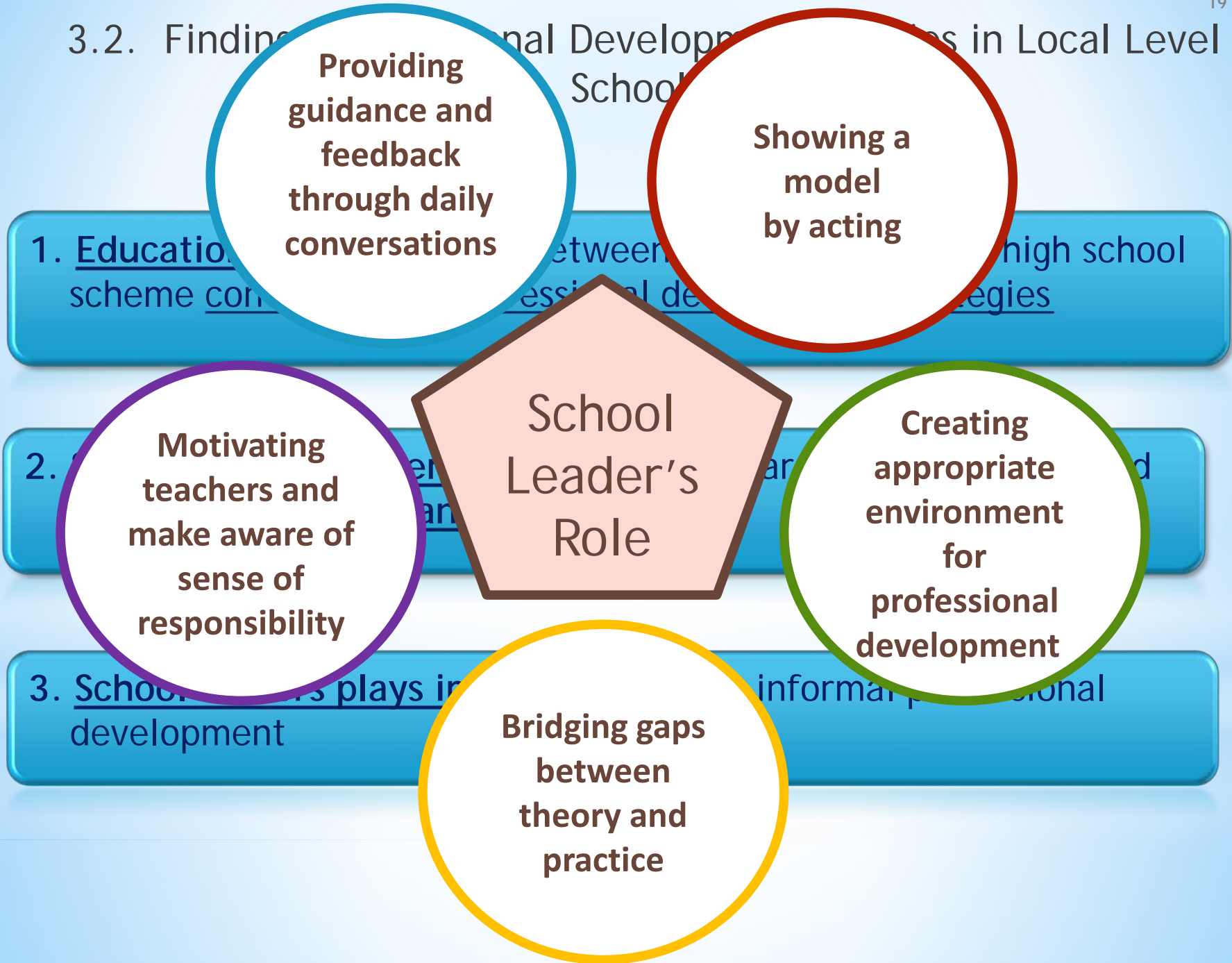
## 3.2. Findings: Professional Development Policies in Local Level

### 3.2.2. School policies

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



### 3.2. Findings on Professional Development Strategies in Local Level Schools



## 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)				
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

### (1) Lesson Goals.

- Understand the reason why Swimmy regained energy and write a book report about it.

Stage	Time	Learning Activities	Style	Teacher's support and evaluation / how to learn.
understand	7min	1. listen what classmates wrote in their letter from the last lesson and review the story. 2. Read aloud today's lesson goals and understand them.	whole class	→ Making them remember that Swimmy has sad feeling in this scene, using pictures and letters. → Make them read at home and prepare for the lesson. → Setting a lesson goal from the question, 'Why did Swimmy regain energy?'
Let's read and find out what Swimmy saw. Write a letter to Swimmy.				
Think and connecting the idea	25min	3. Read and talk about interesting sea creature. (1) Jelly fish looks like rainbow jelly. (2) Lobster looks like bulldozer. (3) Unfamiliar fish. They are pulled with invisible strings. (4) Seaweed forest growing on the rocks looks like candies. (5) Eels. They are long as if forgetting about their tails when looking at their face. (6) Pink sea anemone swinging in the wind looks like palm tree.	whole class	●→ Write sentences which describes interesting things on the board in order to show them narrative expressions. ●→ Show enlarged pictures on the board for better understandings. ●→ Look at the pictures used in figurative expressions and identify similar parts. ◇→ Expanding imagination while listening to classmate's ideas about interesting sea creatures.

### 研究主題

#### 考える力を育てる「学び方」の指導

～学習習慣の形成と主体的な学びを目指して～



これまでの実践で、比較しながら違いや特徴をとらえたり、お互いの考えを交流し合いながら見方・考え方を広げたり、書くことで考えを確かめ理解を深めたりするなど、児童の考える力は徐々に育ってきていると言える。しかし一方で、「考える力」の土台となる言葉や用語の理解、計算技能などに個人差が見られ、全体としても基礎・基本の定着という点で課題が残された。

こうした課題に対して基礎・基本の定着を固りながら、一人一人のもっている能力が十分に引き出せるような取り組みを進めていきたいと考える。そこで、これまでの「考える力」を育てる指導は継続しながらも、研究全体を授業改善、学習規律、家庭学習、学習環境を統合した「学び方」という視点で捉え直し、それらを有効に機能させながら児童の主体的な学びを育てていきたいと考えている。

特に今年度は、学習習慣の中の「学習規律」と「家庭学習」にスポットを当て、学習規律を身に付けさせるための手立てや授業につながる家庭学習のさせ方などについての研修を深めるとともに、それが授業の中でどのように機能し主体的な学びに結びつくのかを授業研究を通して検証していきたいと考える。

なお、これまで本校が実践してきた取り組みを「学び方」指導として以下のように分類する。

- (1) [授業改善] …「課題をつかむ」～「まとめる」など、授業での学習活動としての学び方  
◇「学びのスタンダード」「比べる」「つなげる」「書く」…
- (2) [学習規律] …「タイム厳格」や「相手の目を見て話を聞く」など、集団学習における基本的なルールとしての学び方  
◇「学習習慣表」 ◇「東っ子の学習ルール」 ◇「ハンドサイン」  
◇「声のものさし」
- (3) [反復練習] …「宿題」や「自学（学習・復習）」など、家庭学習や個人としての学び方  
◇「家庭学習の手引き」 ◇「家庭学習がらびりカード」  
◇「家庭読書貯金」 ◇「スキルタイム」
- (4) [学習環境] …「教室」「図書室」「メディア」「人材」など、学習環境を活用した学び方  
◇「学習の足跡」 ◇「読書カード」 ◇「学習コーナー」等



### 国語科研

伝え合い・学び合い

#### 今年度の重点

##### (1) 授業での取り組み

- 身に付けさせたい
- 視覚を明らかにし

##### (2) 授業以外での取り組み

- 読書活動の充実
- 教科書巻末の語彙
- 「話形」「声の大きさ」
- 朝読書・読み聞



## 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



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# 4. Findings: Professional Development in Practice

## Process of Lesson Study of School Based Teacher Training



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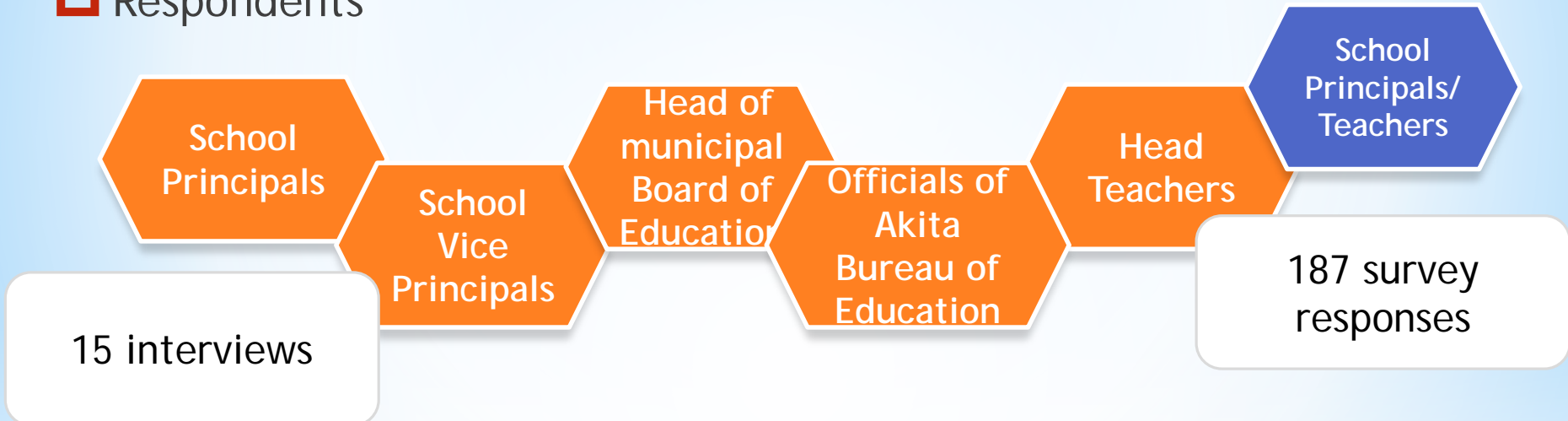
#### 4. Findings: Professional Development in Practice

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



### 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

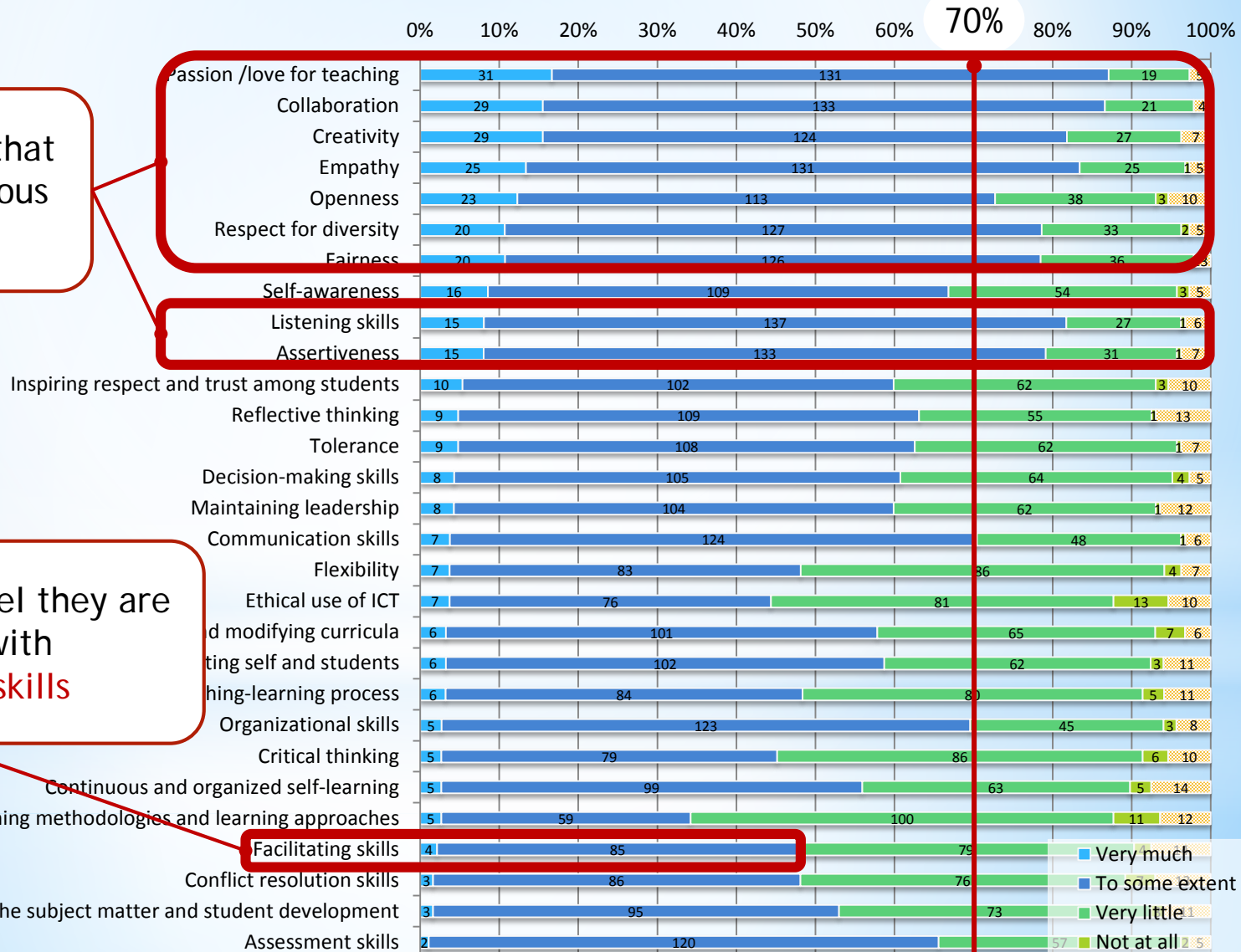
# 5. Teachers' Perception on Professional Development in Akita

## 5.1. Teachers' preparedness (2)

Skills and competencies teachers feel being equipped

Teachers consider that they obtained various kinds of skills

Fewer teachers feel they are equipped with **facilitating skills**

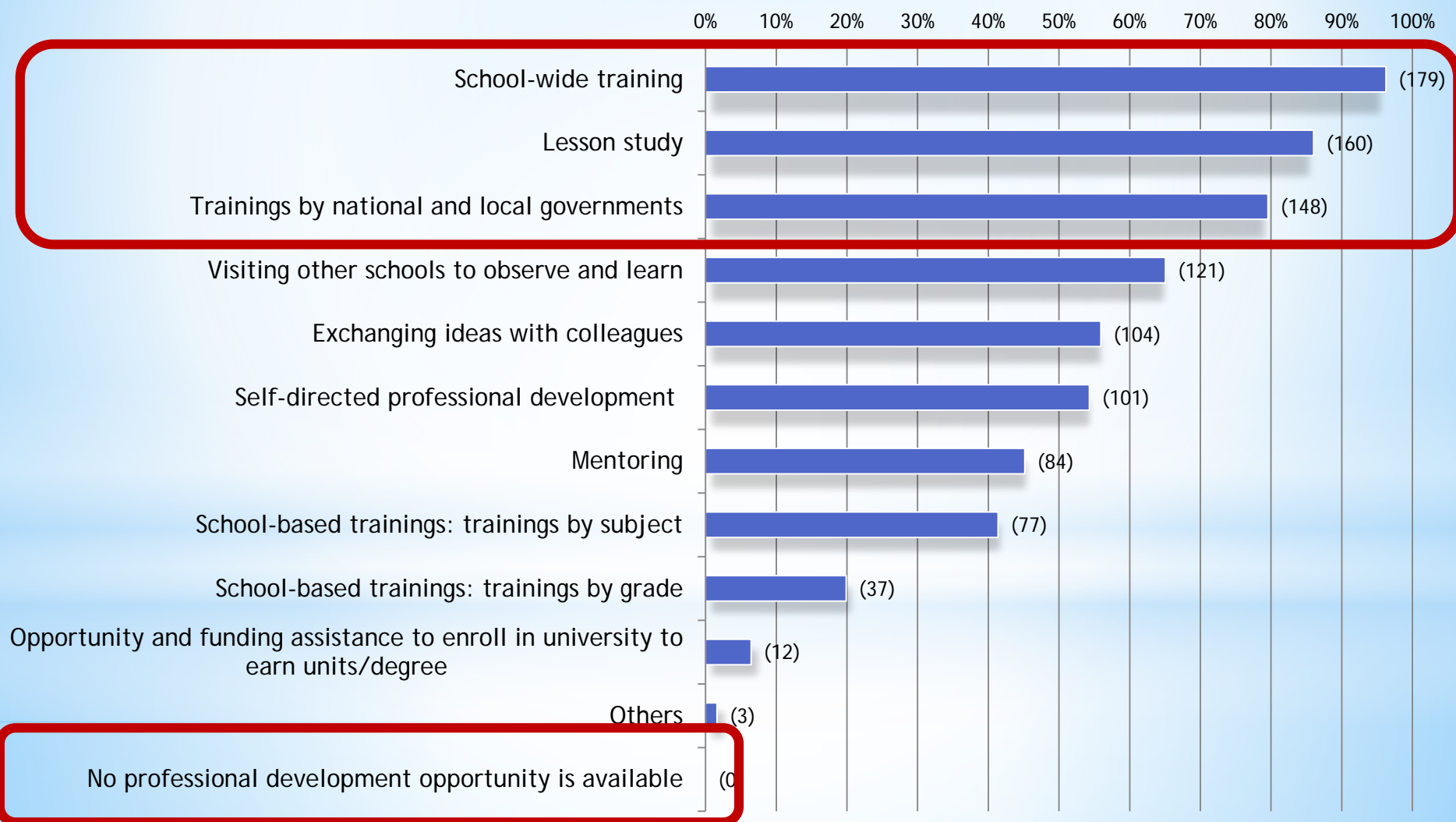




# 5. Teachers' Perception on Professional Development in Akita

## 5.2. Planning and Implementation (1)

### □ Available professional development opportunities

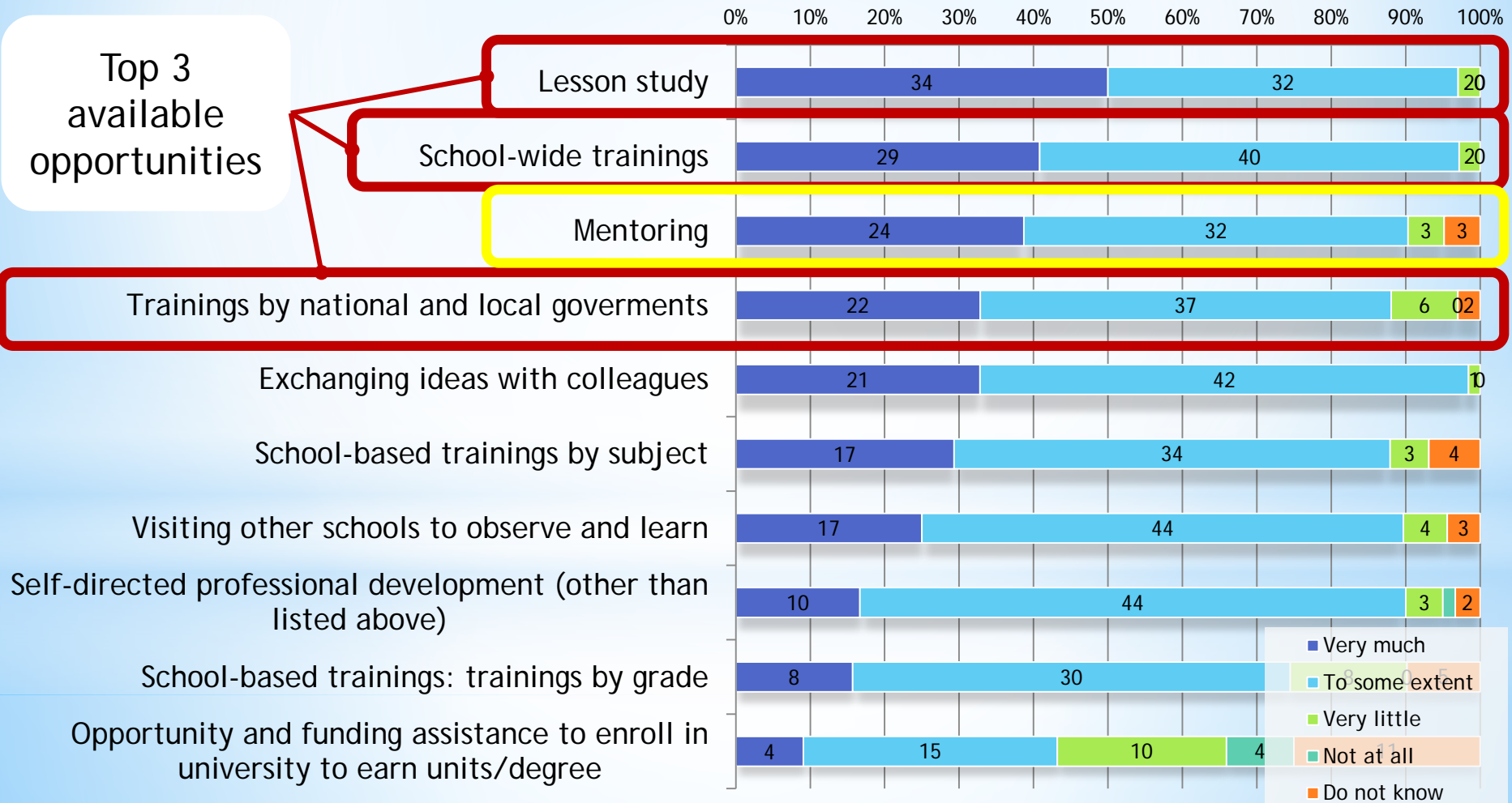


# 5. Teachers' Perception on Professional Development in Akita <sup>30</sup>

## 5.2. Planning and Implementation (2)

### Perceived effectiveness of professional development opportunities

Top 3 available opportunities



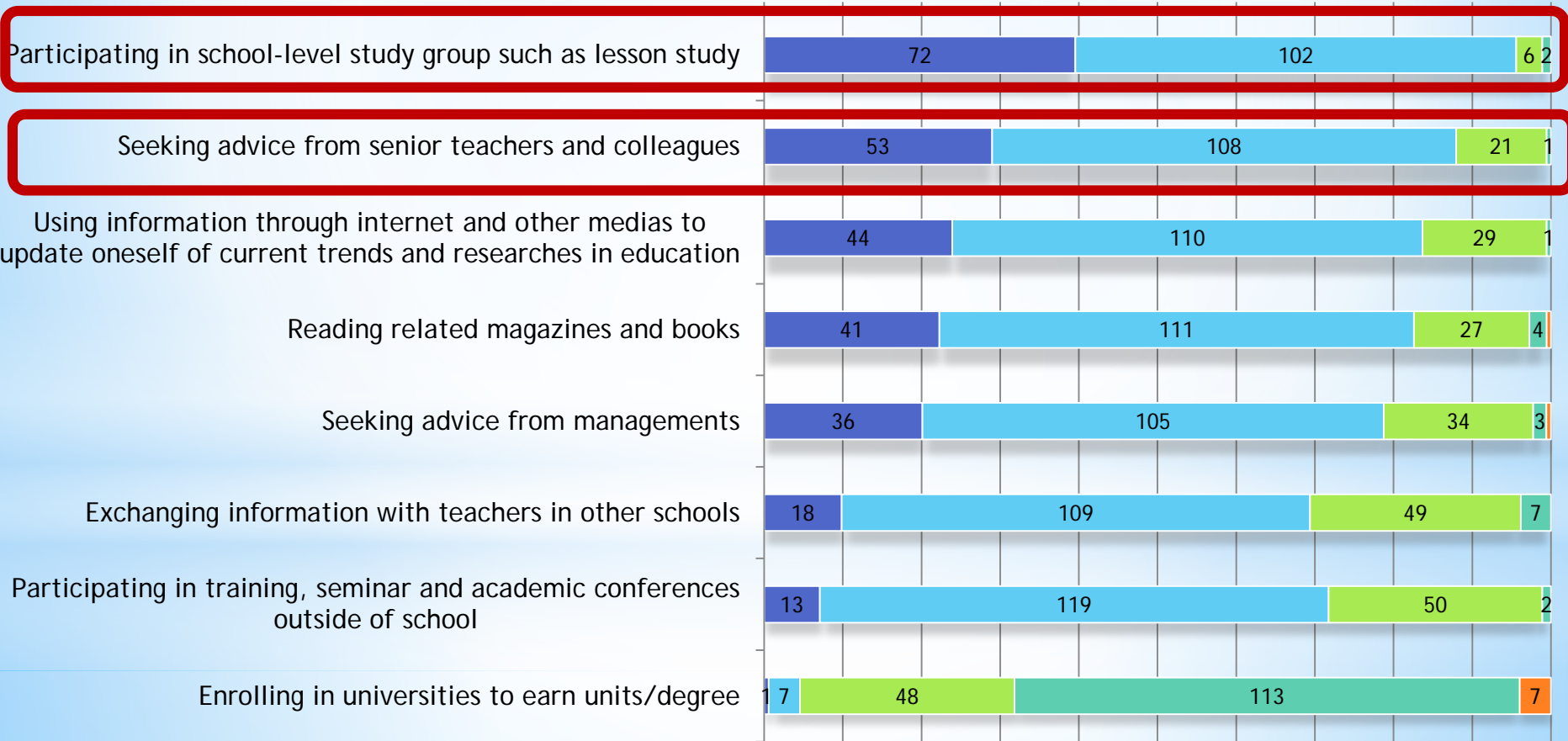
# 5. Teachers' Perception on Professional Development in Akita

## 5.2. Planning and Implementation (3)

### □ Frequency of participating in self-directed learning opportunities

■ Very often ■ Sometimes ■ Not much ■ Not at all ■ Do not know

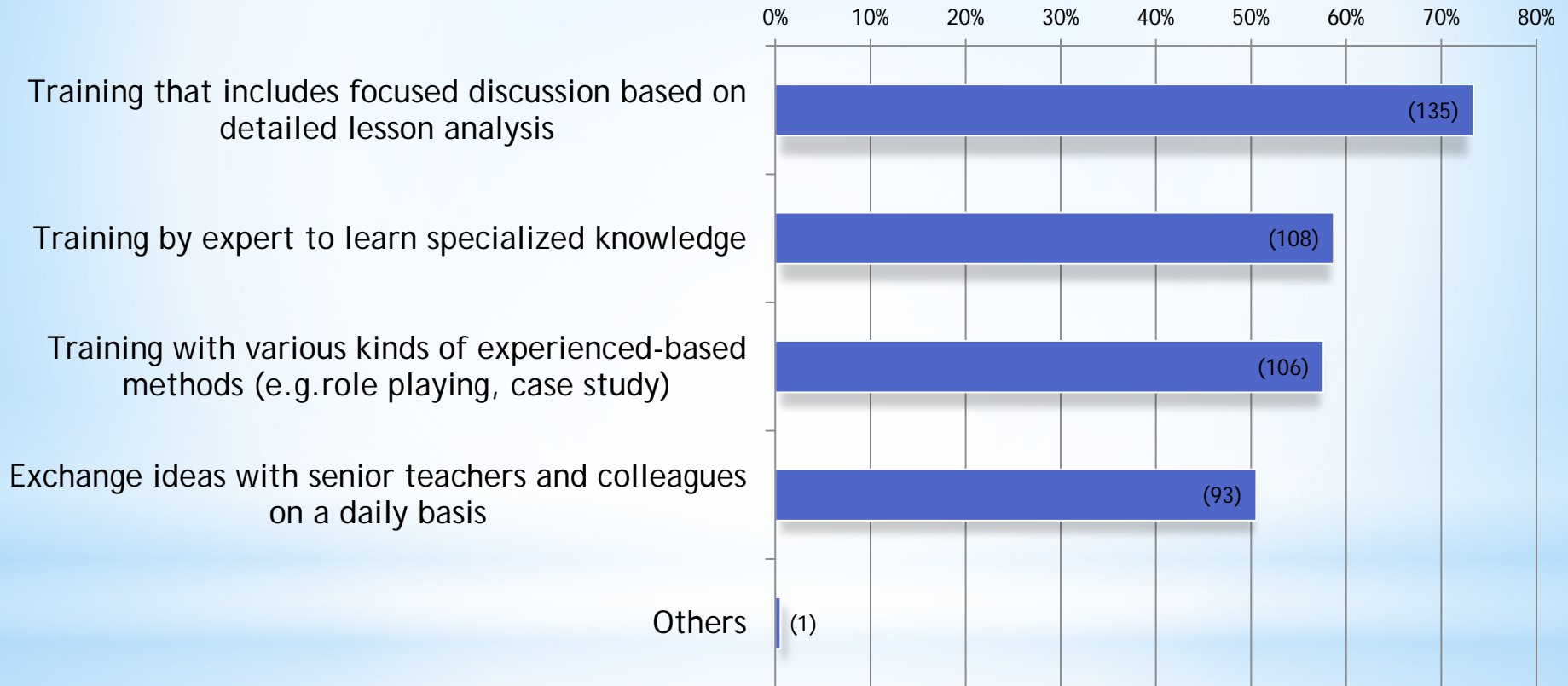
0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%



# 5. Teachers' Perception on Professional Development in Akita<sup>32</sup>

## 5.3. Expected support for professional development (1)

### □ Training needs of teachers





## 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

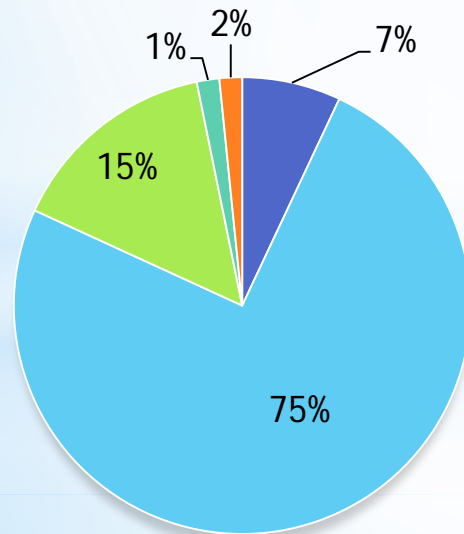
### 6.2. Teachers' perception (1)

- 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?

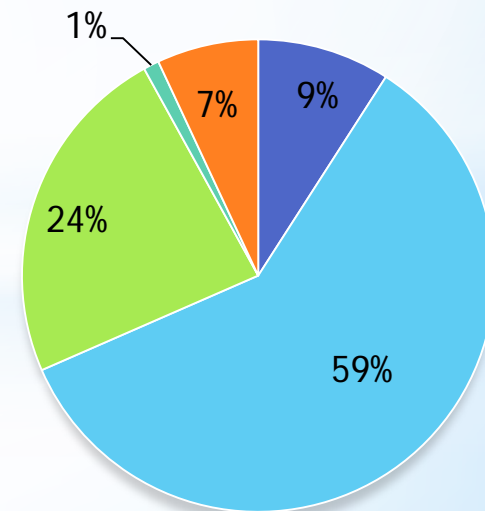
#### The 2008 Courses of Study

■ Very much      ■ To some extent      ■ Very little  
■ Do not know      ■ Not at all



#### School Policies

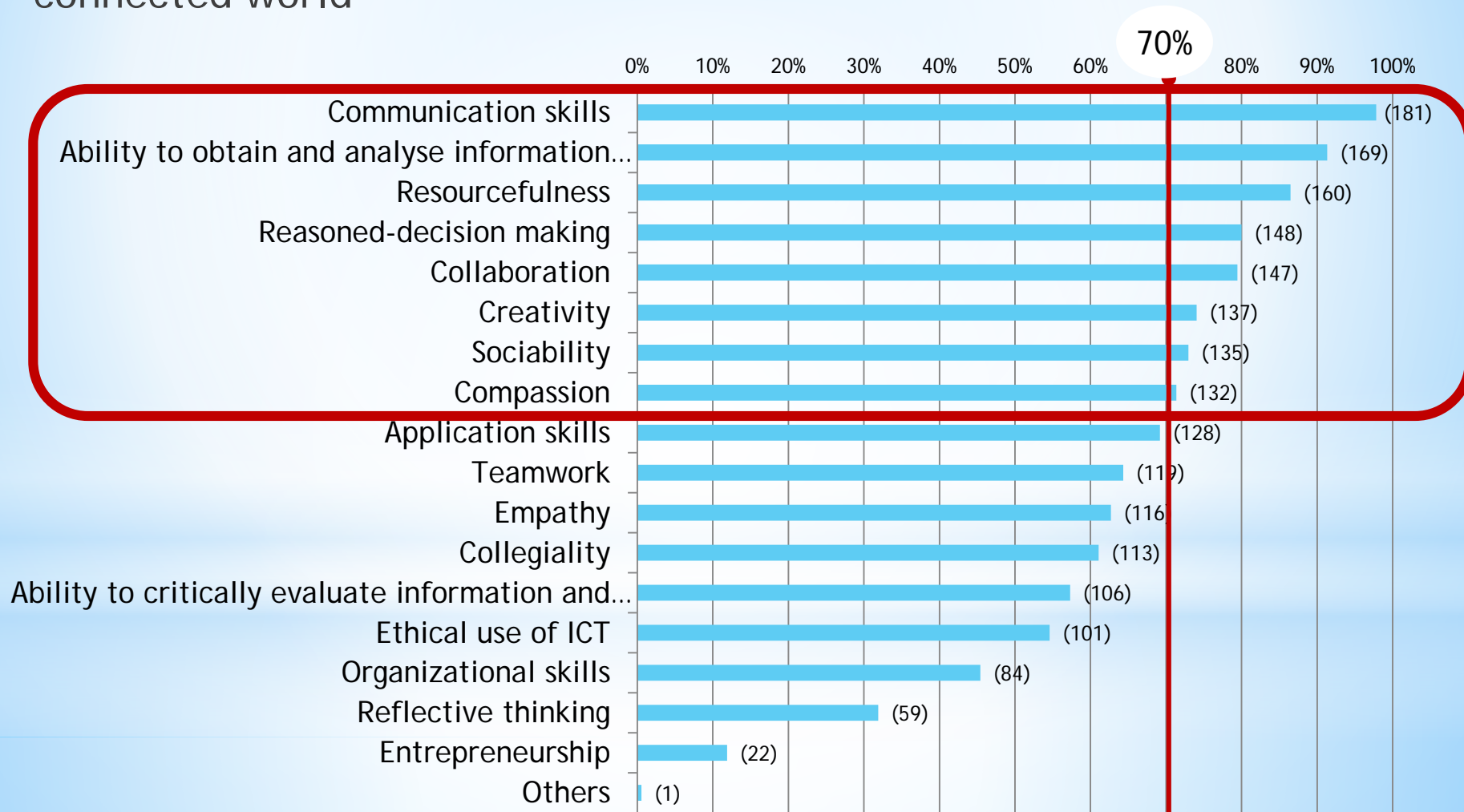
■ Very much      ■ To some extent      ■ Very little  
■ Not at all      ■ Do not know



# 6. Education for Increasingly Globalized World

## 6.2. Teachers' Perception (2)

□ Students' important skills and competencies in relation to inter-connected world



## 6. Education for Increasingly Globalized World

### 6.2. Perception

#### □ Examples of educational activities related to globalization

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



# Achievements and Challenges (1)

## Achievements

- 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

# Achievements and Challenges (2)

## Challenges

- 1) Teachers expect more support from governments, in preparing themselves to promote transversal skills and competencies among student
- 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



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