Bukkyo University commenced its Public Sector Based Elementary School-University Collaborative Projects for teacher education in 2005, winning a Good Practice Award (GP) immediately for 2005-2006. One of these projects is the Teaching Practice Program. From the Teaching Practice Program it has become clear that the fusion of inductive and deductive approaches in direct teaching experience in elementary schools, along with university seminars on education theory, has provided student teachers with a unique, solid foundation of academic, theoretical, practical and personal skills necessary to commence their professional careers immediately as “learner-centered” teachers with a “development perspective”. It is advocated that this proven highly effective method of teacher education be continued through ongoing liaison between university professors, students and in-post elementary teachers, in order to tackle specific challenges, monitor progress and optimize the future quality of elementary school teaching in Japan.

I. Field-Based Elementary Schoolteacher Program for Undergraduate Students

The Faculty of Education of Bukkyo University commenced its Field-Based Elementary School Teacher Preparation Program in 2005. This program is designed for undergraduates aiming to work in the field of public elementary schools. Students, university faculty members and elementary school class teachers work in collaboration to co-ordinate a course schedule and to create teaching and activity materials, including videos and computer graphics. Having developed the materials and plans, a group of students teaches one subject in a class for a semester, collaborating throughout for continued quality development with the elementary class teacher and the university faculty.

The Field-Based program provides students with first-hand experience of elementary school teaching. In conjunction with direct learning from these experiences, students are supported in comparing and reflecting upon their experience in the light of university lectures and theoretical studies concurrent in their university courses. Similarly, students are expected to confirm how lectures and theories work in real classroom situations. The program thus demands that students develop their practical teaching ability by the fusion of inductive and deductive learning from experience and theory respectively.
This Field-Based program was awarded the highly competitive ‘Award for Good Practice for Qualified Teacher Education’ (GP) by the Japanese Ministry of Education, Culture, Sports, Science and Technology. The title of this particular GP award is ‘Public Sector Based Elementary-University Collaborative Project’. The GP award was a two-year process (2005, 2006) and at the end of the period, a short-list of three universities was selected at the GP Final Presentation Conference in Yokohama. One of the three was the Bukkyo University Field-Based Elementary School Teacher Preparation Program. Greatly encouraged by this GP award, and taking it as an acknowledgement of both excellence and further potential, Bukkyo University has continued to research, develop and improve the Field-Based Program.

The Field-Based Program is an umbrella entity, comprising three programs: the Teaching Practice Program, the Visiting Lecture Program and the Open Lecture Program. All are run in cooperation with the Board of Education of Kyoto City. (Figure 1)

1.1. Teaching Practice Program
University students attend elementary school classes and are allowed to practice teaching at Kyoto municipal elementary schools. Usually one seminar group teaches one subject in an elementary school. The collaboration of a triumvirate of students, professors and school teachers is important in this program. This project differs from other volunteer and internship programs because university professors are closely involved. This involvement includes an ongoing advisory/supervisory role, soliciting and monitoring of feedback and parallel quality advancement.

Students commence their study of education issues by firsthand experience in real class rooms. At the same time, students contextualize their findings with their professor as illustrated in Figure 2.

The fusion of inductive and deductive learning for firsthand practice in elementary school, along with education theories presented in lectures and discussed in seminars at university provides a sound basis for the professional qualification of graduate teachers. Throughout their university life students have been able to fuse theory with practice in a spiral model as shown in Figure 3. Students are able begin work as professional teachers immediately since, via the theory-practice spiral, they have gained not only a sound theoretical base but also a wealth of practical experience before graduation. Such qualified teachers who can start immediately to take sole responsibility in classrooms are highly desirable in this age of the retirement of baby boomer teachers, pupil diversity and diversity of parental requirements.
I.2 Visiting Lecture Program

Experienced teachers give university lectures and simulated classes at the university. Students can learn from an experienced elementary class teacher and get the latest information on real classes. A particular advantage of this program is that students have opportunities to discuss their concerns with teachers, based on both theory and their own direct classroom experience, in a stress-free environment without the pressures or constraints of the elementary school timetable.

I.3 Open Lecture Program

The open lecture program presents an opportunity for undergraduates to work together with new-graduate teachers and more experienced teachers of Kyoto municipal elementary schools as the face to face element of correspondence/distance learning courses.

The co-ordinators of the Bukkyo University Field-Based Elementary Schoolteacher Program have
been active in sharing the program’s experiences and issues at both national and international levels in the belief that the rate of progress and depth of enrichment are enhanced by sharing knowledge. It is sincerely hoped that the Field-Based Elementary Schoolteacher Program at Bukkyo University will continue in order to become both more diverse and more widespread.

II. Assessment of Selected Teaching Practice Programs

II.1. Teaching Practice Seminars

The following seminars were offered at Bukkyo University and directed by Professor Shoko Nishioka:

<table>
<thead>
<tr>
<th>Year</th>
<th>Seminar</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>Vertical Group Activities at Taiho Elementary School</td>
</tr>
<tr>
<td>2006</td>
<td>Futaba Aoi Project at Kamigamo Elementary School</td>
</tr>
<tr>
<td>2007</td>
<td>Futaba Aoi Project at Ichiharano Elementary School</td>
</tr>
<tr>
<td>2008</td>
<td>Futaba Aoi Project at Ichiharano Elementary School</td>
</tr>
<tr>
<td>2009</td>
<td>Foreign Language Activity (FLA) at Ichiharano Elementary School</td>
</tr>
<tr>
<td></td>
<td>Sogo Gakushu at Ichiharano Elementary School</td>
</tr>
<tr>
<td></td>
<td>Foreign Language Activity (FLA) at Ogurisu Elementary School</td>
</tr>
<tr>
<td>2010</td>
<td>Foreign Language Activity (FLA) at Taiho Elementary</td>
</tr>
</tbody>
</table>

Two of the above programs are assessed below for impact and potential for future development: Futaba Aoi Project at Kamigamo Elementary School (2006), and Foreign Language Activities at Ichiharano Elementary School (2010).

II.2. Futaba Aoi Project, Kamigamo Elementary School (2006)

The Futaba Aoi Project (2006) was designed for Kamigamo Elementary School. This school is in the locality of Kamigamo Jinja (Shrine) which is a designated World Heritage Site. Kamigamo Shrine has a strong relationship with the Aoi Matsuri (Hollyhock Festival) held annually in May, and one of the three main annual festivals in Kyoto. The Futaba Aoi (hollyhock) associated with the Aoi Matsuri is a highly symbolic plant with both religious and historical significance.

The focuses of the Futaba Aoi Project were three-fold.
1. Futaba Aoi (plant) - botany, environmental factors
2. Aoi Matsuri (festival) - history/cultural significance
3. Kamigamo Jinja (shrine) ritual/community

Firstly, the program enabled pupils to learn about the Futaba Aoi plant itself. Through hands-on activities they studied the plant’s particular features and physical characteristics and made detailed
botanical drawings. They conducted experiments related to plant growth and by documented trial and error they learned to cultivate it by propagation (root separation). Next they researched environmental issues currently concerning the Futaba Aoi. Recently it has become more and more difficult to find the Futaba Aoi because of environmental change. The plant was used as an means to introduce pupils to wider aspects of environmental, soil and climate change and related issues.

Next the pupils explored the plant’s various cultural significances. Futaba Aoi is a valuable cultural symbol and as such it is widely felt that it should be monitored and protected in the face of environmental hostility. All over Japan people have been familiar with the Futaba Aoi for centuries, not only as a wayside (forest floor) plant but also as the Tokugawa family crest. The Tokugawa name is a keystone in Japanese cultural identity, the Tokugawa shogunate having ruled Japan during the Edo Period (1603 until 1868). Furthermore, the Futaba Aoi gives its name to the Aoi Matsuri Festival which is purported to originate from the 6th century and is conducted as a rite to ensure good harvests. The festival is a visually spectacular affair involving shrine rites, horseback archery, a procession of livestock carts and 600 people in various traditional costumes decorated with the Futaba Aoi. Pupils learned about the historical significance of the Futaba Aoi, the Aoi Matsuri, the shrine rites and community culture associated with Kamigamo Jinja.

In these pursuits, pupils studied both individually and as a group. They used both books and internet for their research, IT Education being an important aspect of the project. Pupils learned how to conduct internet research and also learned means of self-expression through Power Point. They also took part in field trips and conducted interviews with Kamigamo Jinja personnel.

At the beginning, Bukkyo University Faculty of Education students and their professor made one 15-class plan in discussion with the elementary school teachers. The structure, practice dates and the contents are given below.

**Futaba Aoi Project, Structure:**

- **University students**
  - 3 groups, 6-8 students per group
  - 24 in total
- **Elementary school pupils (6th grade)**
  - 3 groups, 29 pupils per group
  - 87 in total
- 15 lessons.

**Futaba Aoi Project, Practice dates and contents:**

Oct. 26 2006 Introduction
Nov. 19 2006  Grouping, library research
Nov. 30 2006  Investigation: Internet, books
  Work sheet
Dec. 07 2006  Investigation: Internet, books
  Work sheet
  Planning questions to shrine personnel ‘Gonnegi’
  Work sheet
Dec. 14 2006  Interview (questionnaire) to ‘Gonnegi’ at Kamigamo Shrine
  Work sheet
Dec. 21 2006  Discussion about contents of presentation
Jan. 11 2007  Power Point workshop. Making presentation in Power Point
  Work sheet
Jan. 18 2007  Power Point workshop
  Making presentation in Power Point
  Work sheet
Jan. 25 2007  Using animation
  Presentation workshop
  Work sheet
Jan. 30 2007  Presentation workshop.
  Work sheet
Feb. 01 2007  Class presentation
Feb. 08 2007  Presentation for 5th grade pupils, PTA, community
Feb. 15 2007  Reflection/critique, summary
Mar. 03 2007  Planting ceremony at Kamigamo Shrine
  Presentation of DVD to shrine
Mar. 19 2007  Distribute DVD Futaba Aoi
  Presentation of DVD to each pupil by students

Practices were attended by all of the 3rd grade and some of 4th grade students of Professor Nishioka’s seminar group. 3rd grade students who registered for the program were able to receive 2 credits upon satisfactory completion. The course title for this two-credit program/subject is ‘Education Experience Practice’.

The bulk of the responsibility for class planning and teaching plans was given to the university students. That is, university students planned and taught or led the lessons, under the advice and supervision of their professor. A considerable number of meetings were required, for class planning and reflection, as follows:
1. Meeting 1
After each lesson students and their professor assemble to report to each other. They divide into 3 groups for reflection, correction, and future planning and to decide who will teach next. Those selected make lesson plans at home, uploading them into an internet briefcase available to all.

2. Meeting 2
Students assemble to critique each lesson plan. Divide to 3 groups to make lesson materials (this may require 1 or more further meetings).

3. Class
Students, professor, class teacher, and principal meet after each class to report, evaluate, and forward plan.

As a result of the formulating procedure, the class lessons had a number of unique characteristics as follows:
1. Each of the 3 student groups makes lesson plans and the 3 groups critique each other.
2. High teacher-pupil ratio (1 university student: 29 elementary school pupils).
3. Elementary school pupils conduct research/find out for themselves under the 2-layer group-work class-plan.

Upon completion of the program, students held a meeting (March 21, 2007) to discuss openly and to begin to conduct a retrospective appraisal. Later they completed a survey designed to track and assess their skill acquisition, and also wrote term papers based on their involvement. The minutes of the March meeting, the term paper and the survey (completed by 15 students, May 2007) suggest that students developed a number of new skills as well as enhanced some existing skills. Among these skills were planning expertise, programming experience and communication skills. At the same time, through group work they developed senses of both shared and individual responsibility and learned skills of co-operation, tact, self-criticism, self-awareness and constructive criticism of others’ ideas.

Interviews of the Kamigamo Elementary School principal and school teachers after the program (May 2007) suggest that there were also benefits to the elementary school, falling under two major themes. The first benefit is a sense of rejuvenation or ‘school renewal’. The school stated that it became more lively and refreshed as young men and women joined the classes. Pupils felt they could play with the students as if they were their older brothers and sisters. The second benefit is the stimulation of schoolteachers. Students creative methods and trial of new ways of teaching were often different from the accustomed (and sometimes stale) methods in current use by the
teachers. These new methods included group teaching using information technology.

Besides the benefits discussed above, a number of problems or challenges presented themselves to be overcome in future. One of the challenges of the program is its limited time. Students expressed the desire to have more time with the pupils, perhaps in addition to the official lesson hours – after the 2006 program, students spent lunch time with pupils or played with them in recess time. Also, students had regular classes at university, so not all of the Nishioka seminar students were able to attend the meetings or classes. Even though students wanted to spend (more) time on this program, they did not in fact have time in their busy university schedules.


Foreign Language Activities were commenced at Ichiharano Elementary School in 2009 in anticipation of forthcoming changes to the national curriculum. Under new guidelines (laid down in March 2008) by the Japanese Ministry of Education, Culture, Sports, Science and Technology (Monbukagakusho or Monkasho for short), English is to be taught in the 5th and 6th grades of all elementary schools in Japan from April 2011. In the new government curriculum guidelines, the goal of the FLA is to develop understanding of foreign languages and cultures. Through experiencing foreign language activities is hoped that pupils will develop the attitudes required for active communication. Familiarizing them with foreign voices and basic expressions is aimed at enabling them to hear and use foreign languages and thus to develop basic communication ability.

The contents of fifth grades and sixth grade classes are designed as follows:

1. To address the following issues, ensuring active communication using a foreign language.
   a) To experience fun through communication in a foreign language.
   b) Active speaking and hearing in a foreign language.
   c) Realizing the importance of communication by using language.

2. To address the following issues, deepening understanding of Japanese and foreign languages and cultures through experiences.
   a) To become familiar with sounds and rhythms of foreign languages by noticing differences from Japanese, and to explore the interest and richness of word sounds.
   b) To discover the diversity of perspectives and ways of thinking in the world by observing and exploring differences between Japan and foreign countries in terms of lifestyle, customs and social events.
   c) To deepen understanding of cultures etc. through the experience of interaction with people with different cultures.

More specifically, this English is designated as Foreign Language Activities (gaikokugokatsudo) with
the emphasis on “trying the have pupils understand language and culture experientially”, in other words, learning by immersion rather than bookwork. ④

In direct pursuit of the designated Monkasho goals, the FLA program designed by Nishioka Seminar for Ichiharano Elementary School was aimed mainly at grades five and six. The program was additionally used for grades three and four with some adaptations. The title of the program was “Joyful English Activity” (No.1 ) with the goal of stimulating enjoyable communication in English. Following the principals of Nishioka Seminar's previous elementary-university collaborative projects, the professor, school teachers and students worked together for each class. A point of difference from previous programs was that in this FLA program a native English speaking lecturer, Felicity Greenland from Bukkyo University also contributed, who is a specialist in teaching English and in teaching songs and dance.

Particular features of the Bukkyo University FLA program:
1. Students, professors, class teachers and pupils speak only English in class. Teaching/ communication methods devised accordingly.
2. Combination of class work and group work. The pupil-student ratio is six to eight pupils per student.
4. Using songs and dance/actions appropriate to class content. Some songs/action songs were devised by the native speaker professor specifically in order to use the new vocabulary learned in the lessons.
5. Self expression is the main target of learned expressions and communication activities. For example pupils do not learn only the names of colors and foods, but learn them in order to express themselves, their favorite colors and favorite foods.
6. Attendance and participation of university students from other (non-native English speaking) countries.

FLA Practice at Ichiharano Elementary School in 2009:
1. Practice for the 5th and 6th grades
   5th grade (2 classes) · 6th grade (2 classes)
   Five times each grade - 10 class hours

   Each student: every time
   introduces their name and favorite color
   shows an object of that color
   adds their favorite food, future job etc.
May 13, 3rd, 4th period
- Greetings with teachers and friends.
- Favorite color
- English songs and games, worksheet

May 28, 1st, 2nd period
- Self introduction, colors (review)
- English expressions about movement, parts of the body
- English songs and games, worksheet

June 10, 5th grade: 1st, 2nd. 6th grade: 3rd, 4th period
- Video of self-introductions by native speakers of several countries
- Communication with Vietnamese visiting students
- Parts of the body, favorite food
- English songs and games, worksheet

June 18, 1st, 2nd period
- Animation and book of “The Very Hungry Caterpillar”
- Days of the week, food, colors
- English songs and games, worksheet

July 2, 1st, 2nd period
- Self-introduction with teachers and friends
- Communication with native speaker
- English songs and games, worksheet

2. Practice for the 3rd grade and 4th grade
3rd grade (2 classes) · 4th grade (2 classes)
Three times each grade - 6 class hours

May 28, 1st, 2nd period
- Greetings with teachers and friends. Favorite color
- English songs and games, worksheet

June 18, 3rd, 4th period
- Video of self-introductions of several countries
- Communication with Vietnamese students
- Parts of body, favorite food
Development of Elementary School - University Collaborative Projects

- English songs and games, worksheet

July 2, 3rd, 4th period
- Self-introduction with teachers and friends
- Communication with native speaker
- English songs and games, worksheet

Results of the Foreign Language Activity (FLA), ‘Joyful English’ Program
Observation, and teachers’ reports after the program, produced the following positive results:
1. By the last class, pupils could introduce themselves to each other, and with a native English speaker.
2. Pupils could answer questions by a native speaker.
3. Teachers indicated that pupils were excited and looked forward to the next English Activity class.
4. After the classes pupils think they can speak English, and want further English Activity classes.

Documentation by students (total 13 persons (6 female, 7 male))
This documentation consisted of a) reviews of each class, b) reviews of the all classes overall, c) reviews of differences between grades, class teachers and pupils. The form of Foreign Language (English) Activities as a Teacher Practice Program, the effects of the program on students themselves, and matters to address, were indicated as follows:

1. English Activity as Teacher Practice Program
   a) Could be started from zero without restriction to an established method
   b) New, and therefore challenging
   c) Easy to instantly gauge the responses of pupils
   d) Possibility of development of video, animation and Power Point etc
   e) Clear purpose, that is, to communicate with foreigners in English
   f) To create joyful activities and enjoy with pupils
   g) To plan classes and experience them with native speaker and foreign students
   h) Could make songs for the class as native speaker is an experienced singer.
      Could learn teaching methods from native speaker EFL teacher.
   i) Could feel achievement because the results are clear - pupils had become able to introduce themselves, and understand what their friends say, and communicate with native speaker, although they could not speak English at all at the beginning.
   j) Clear differences between grades: 3rd and 4th grades were active and positive and repeat without being instructed to do so; 5th and 6th grades were shy to talk about themselves
and view the lesson as ‘study’ rather than ‘activities’.

k) Variation in teachers’ attitudes: some were positive and active, others were reticent, even negative, and did not join the classes.

l) Pupils appeared to enjoy English Activities most in the classes where their teacher appeared to enjoy it.

m) If the class teacher spoke Japanese, pupils stop concentrating on the English Activity.

2. University Students observed the following in themselves:
   a) Development of planning expertise/experience
   b) Development of communication skills in group project
   c) Development of leadership, co-operation and collaboration skills
   d) Discover/work on own problems/weakness through discussion
   e) Understanding of importance of class management and teachers’ roles by attending several classes/working with several teachers
   f) Development of learner-centered and developmental perspective not transmission perspective
   g) Development of responsibility as a teacher
   h) Self-reliance, self-confidence
   i) Need to study English

3. Matters to address
   a) Need official class hours at least one hour per week.
      Students can obtain two credits by successful completion of the subject ‘Education Practice Experiment’, however, this subject is very intensive yet has no classes in the official timetable. Students must gather after their regular classes, sometimes at night, to prepare for the practice classes. This is tough on the busy students and furthermore it is logistically difficult to assemble all the members at once.

   b) Need co-operation and understanding from elementary school class teachers.
      One big problem is the teachers’ low level of ability in English. In Joyful English FLA some teachers tried to increase their ability, but the others seemed to try to escape the situation, by speaking Japanese, avoiding speaking English or even failing to fully attend the English lessons. It is feared that this may be a major and widespread issue for FLA in other elementary schools.

   c) Need time to know pupils outside the classes
      Students felt that the class time was not enough to get to know the pupils sufficiently. The Elementary schools where students practiced were located far from their university and so interaction time was limited not only by class schedules but also by distance.
III. Results and Effects of Field-Based Elementary Schoolteacher Program

The substantial improvement of general practice during these programs, evident through observation and through reviews by participating students and teachers, indicate that overall the programs are effective in enhancement of effectiveness in both students, professors and elementary schools.

Students produced increasingly creative work and directly experienced the reality of teaching in a genuine environment. At the same time they developed self-confidence, communication skills and the ability to continually assess and improve. By participating in these programs, students developed sufficient teaching ability to commence work immediately. Students who experienced these programs in their third year in 2007 went on to pass their teachers’ exams and now already have one year experience as effective professional school teachers.

All students who took these programs in their university seminar passed their teachers’ exams. Reporting back to the university, they frequently state that it was highly beneficial for them to have had their theoretical studies concurrently tested, and verified, by experience on the projects. Practice supported their reading and reading supported their practice. They could clearly recognize the fusion of theory and practice during their studies.

In the highly competitive teachers’ examination and interviews, students were able to relate their first hand experience of the teaching practice programs. In prefectures where teaching experience is explicitly preferred, students have been able to demonstrate their experience and answer questions on how to solve class or teaching problems on this concrete basis. One student reported that at his interview (by which he secured a position) all candidates were graduates with one or more years’ experience as temporary school teachers. Based on his university experience he was able to compete successfully with working teachers who were also qualified to start immediately. This was not an isolated case; elementary pupils’ parents reported that another recent Bukkyo University graduate teacher was totally unlike a novice teacher. She in turn reported that her project experience turned out to be invaluable in problem solving at work.

The teaching practice project not only gives students first hand experience but also provides a sound theoretical base through seminars. The students learn Pratt’s Five Perspectives on teaching including the five fold relationship between teacher, learners, content, context and ideals. In planning class lessons, they are required to consider the relationship between transmission and development perspectives, and after the class, they further analyze the lessons using five perspectives.
In both the Futaba Aoi and the FLA programs, students aspired to work from a developmental perspective over a transmission perspective. They found that they were apt to adopt a transmission perspective against their better judgment, and were supported in consciously working against this natural tendency, which has proved invaluable now that they are working independently.

The Transmission Perspective is the so-called “traditional and long-standing perspective on teaching” that is, “the dominate elements are the teacher and the content”, with the primary focus on “efficient and accumulate delivery of that body of knowledge to learners.” The Developmental Perspective on the other hand is the emerging dominant perspective, “based on a view of learning derived from cognitive psychology wherein each learner is assumed to have developed a personal cognitive map to guide his or her interpretation of the world.” This view holds that “when they are confronted with new information that doesn’t fit, it causes a moment of imbalance or disequilibrium until they can either dismiss the new information or revise their cognitive map. Thus the teacher’s role is to challenge and disturb that equilibrium, causing learners to reestablish it through reconstructing their understanding of something.” This is a “learner-centered” philosophy of teaching” requiring that the “teaching must take its direction from the learners’ knowledge not the teacher’s.” In aspiring to a developmental perspective, aiming to develop “learner-centered” teaching, students found they wanted to know more about their pupils in order to devise optimum lesson plans, hence their desire to spend more time with the pupils.

In addition, the university environment also immersed both students and professors in an openly deliberate learning strategy. Students themselves acquired their teaching theory and practical knowledge in a developmental perspective oriented environment. They were not forced to teach a certain way but, rather, faced their own imbalance or disequilibrium and experienced trying to re-establish their maps. This enabled them to directly empathize with their elementary school pupils. In turn, the professor(s) adopted a Nurturing perspective, and an andragogical teaching methodology, seeking always a “balance between caring and challenging” whilst learning at every stage from student feedback and observation of student behavior. On one hand the professors empathized with student learners while providing support and encouraging them throughout their attempt to learn (caring); on the other they maintained expectations that were “both achievable and meaningful for learners” (challenging). In this way a palpable fusion of the theory and practice occurred for both parties: theory supported practice whilst practice enabled a deeper understanding of theory.

Through these projects, unique and effective teacher education has been shown to have succeeded on several levels. It is felt that a number of elements of this project are too important to be ignored. These projects have been established and practiced in Kyoto City, which has many distinct features.
of its own, in particular the favorable and supportive environment for such experimentation. Firstly, historically, Kyoto City citizens created Japan’s very first elementary schools. Secondly, and not unrelated, there is an especially close relationship in Kyoto City between the local community and its schools. Thirdly, it is impossible to overlook Kyoto’s rich culture and tradition, widely taken to represent and figurehead Japan as a whole. By virtue of its pioneering work in Elementary School-University Collaboration, Bukkyo University may be said to hold an inestimable responsibility to continue to promote these projects and share their findings, for the sake of improved teacher education not only in Kyoto City but in Japan as a whole.

NOTES
1. These three diagrams (Figures 1-3) were made to apply for the ‘Award for Good Practice for Qualified Teacher Education’ of the Ministry of Education, Culture, Sports, Science and Technology. Report of “Public Sector Based Elementary-University Collaborative Project”, Faculty of Education, Bukkyo University 2006. Translated by authors.
2. Work sheet: a paper in which each pupil writes what he or she has learned in the lesson and evaluates their self-study by circling a smiley/sad face, or good/dried futaba aoi etc.
8. Ibid p.49.
9. Ibid p.49.