Socialist Republic of Vietnam

Vietnam Preparatory Survey for a Science Experiment Education Project (Promotion of BOP business partnership) Report (Summary Version)

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Japan International Cooperation Agency (JICA)

Gakken Educational Co., Ltd. KOKUSAI KOGYO CO., LTD.

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1. Summary of survey

1.1 Background

Since the expansion of the market economy in the 1990s, the Socialist Republic of Vietnam (hereinafter, "Vietnam") has seen a sustained annual economic growth of over 7%. In Vietnam education is located as one of the most crucial policies from the perspective of training human resources. The government aims to train personnel capable of adapting flexibly to the international situation, and in 2001 announced an Education Development Strategic Plan. The following year in 2002, a new curriculum for primary education institutions started to be introduced. Under this new curriculum, emphasis shifted from the conventional teacher-centered rote-memorization style of learning to student-centered studies that develop problem-solving abilities, and in mathematics textbooks, practical problems using tables and diagrams increased, and science textbooks started to introduce many practical examples making full use of colorful images and diagrams.

However, qualitatively, many issues currently remain. Firstly, while rapid economic growth continues, the economic gap between regions is expanding and this manifests as gaps between schools in education on the ground. In Vietnam, although course fees are free in state primary schools, other costs such as PTA membership fees and school building construction/improvement fees are borne by the students. Hence, while urban schools that are comparatively wealthy economically such as in Hanoi and Ho Chi Minh City may be complete with computers, libraries and TVs, many schools have only tables, chairs and blackboards, and have no teaching materials or audio-visual educational materials.

Furthermore, there is an overwhelming lack of school buildings to accommodate the continued increase in the number of children, and with the exception of some cities, many primary schools run a two-part system of classes in the morning or afternoon. Hence, the total number of annual class hours for an primary school in Vietnam is 660 hours, which greatly falls below the international standard of 1,015 hours. Likewise, teachers only work mornings or afternoons and work as home-teachers or cram-school lecturers to make ends meet, and there is a problem that for economic reasons talented personnel do not take up teaching.

Due to the background just described, the project was implemented since the "Science Experiment Classes" proposed as the BOP business in this survey contribute to the "issue detection/resolution type of personnel training", which is the aim of the Vietnamese government. Also the classes are thought to supplement three of the issues within current primary education, namely (1) the inadequate maintenance of educational facilities, (2) insufficient class hours, and (3) lack of employment opportunities for teachers.

1.2 Project overview

1.2.1 Aims

The overall goal, purpose and outputs of the project are as follows. Through activities, by attaining the project objectives and improving primary education skills, the aim of this work is to raise living standards in Vietnam.

Overall Goal: To improve the standard of living through enhancement of

abilities in primary education.

Project Purpose: To help development of human resources with

problem-detection and problem-solving abilities through "Science Experiment Classes" operated as a BOP business and also to create employment for the BOP layer in this business.

Outputs: 1. Selection of partner companies in Vietnam

2. Establishing the management framework for pilot projects

3. Establishing local production systems4. Establishing local distribution channels

5. Partnership with the Ministry of Education and Training

1.2.2 SCOPE OF WORK

Vietnamese Agencies Involved

Counterpart: Ministry of Education and Training of Vietnam

Vietnamese corporation Company A Primary school students in Vietnam

Beneficiary:

1.2.3 Focus regions

Focus regions of this project: The suburbs of Hanoi City in Vietnam

1.2.4 SCOPE OF WORK

Under this project, the spaces in and outside of Vietnam's primary schools will be managed by the study facilities (Science Experiment Classes) that use them. Within the Science Experiment Class project, the focus will be teachers and students at Vietnam's primary schools on the ground. Teachers who are teaching at inadequate educational facilities and who are unable to obtain sufficient status and income will, due to the provision of the Science Experiment Classes which does not require major investment, receive instruction materials and an additional income. Likewise, one aim is to create a mechanism to provide a reasonably priced new education to primary school students who, amidst the situation described above, cannot receive an adequate education and cannot attend cram-schools run by private companies charging high course fees.

1.2.5 Work implementation framework

The implementation framework for this work is shown in Diagram 1.

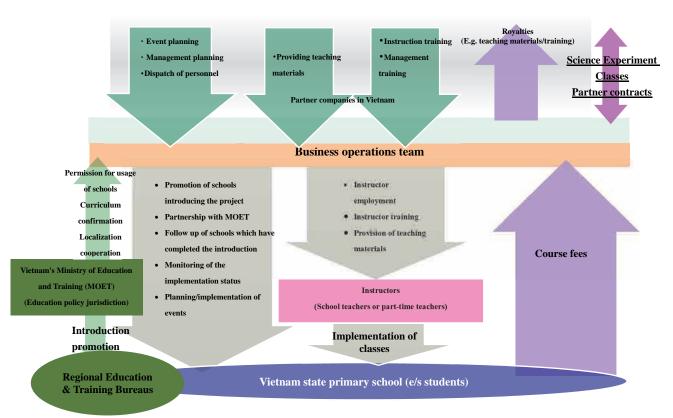


Diagram 1: Overview of the business model

2. Current situation in Vietnam

2.1 Basic information on Vietnam

Bordering China and Cambodia, Vietnam is a long, narrow country running north to south with a national territory of 329,241 square kilometers. Three quarters of that area is covered by mountains and highlands.

The current population is around 91.7 million, and since the Doi Moi policy was introduced in 1986, the results of the market economy and liberalization have been rapid expansion in the key industries of agriculture, mining and manufacturing, and the GDP per capita as of 2013 was 1,896 US dollars.

In recent years, Japanese companies have made remarkable inroads, with in particular the location

of the manufacturing centers of the manufacturing industry and exports of electrical products and vehicle related components to neighboring countries as well as Japan.

Vietnam has also gained attention not only as a manufacturing hub but also as a new market due to the improvement of income standards, and particularly due to the large strata of young people, which apparently has an average age of 27 years, businesses focusing on the strata of young people are expanding rapidly.

The nation's capital is Hanoi in northern Vietnam, but the southern commercial city of Ho Chi Minh is growing on a similar scale alongside the rapid development of cities such as Da Nang, Can Tho, Haiphong, and Hue.

2.2 Vietnam's political and economic situation

At the 6th Party Conference in 1986, the Doi Moi route continued, which had been central to introducing a market economic system and opening the country to foreign business, there was an approach at structural reform aimed at introducing foreign investment and increasing international competitiveness which achieved major progress, and thereafter Vietnam progressed the promotion of trade in Southeast Asia by acceding to the Association of Southeast Asian Nations (ASEAN) in July 1995, joining the ASEAN Free Trade Area (AFTA) in January 1996, and through participating in Asia-Pacific Economic Cooperation (APEC) in 1998.

Then in 2011, the 11th Party Conference was held, and proclaiming a policy with the objective of growing into a modern industrial state by 2020, annual growth has continued as per the diagram below.

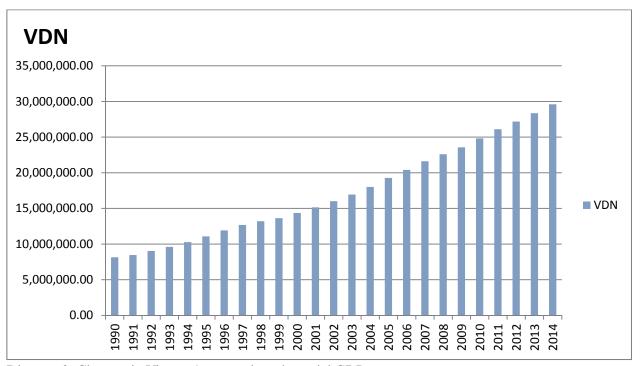


Diagram 2: Changes in Vietnam's per capita substantial GDP

Source: IMF

On the other hand, problems are occurring such as the widening of the rich-poor gap, flourishing corruption, and the adverse effects of bureaucracy. In response, corruption prevention has been reinforced, administrative and civil service reforms have been implemented, and the treatment of non-performing loans and restructuring of state companies has pushed forward improvement of the inefficient economy. At the same time, in 2013 members of the National Assembly took a vote of confidence on personnel-approved instructors at the grade of cabinet ministers or above and amended the constitution, and while a single-party system, movements to incorporate democratic elements are currently beginning to unfold.

2.3 Current situation of overall foreign investment in Vietnam

Vietnam acceded to the World Trade Organization (WTO) in 2007, and excluding areas which would affect national interests such as the armaments industry and projects harmful to the natural environment, many service areas such as finance, commerce and logistics were opened within five years of the accession. However, part of the logistics industry and education industry, regardless of the fact that formerly 100% foreign investment was permitted, has been amended so that only joint enterprise is permitted, and some industries are also averse to being open. Hence, not all business areas have been opened, and even after liberalization there are cases in which license authorization is problematic in business areas such as importing/distribution and retail.

2.4 Current situation of Vietnam's BOP layer

BOP is an abbreviation of "Base of the Economic Pyramid" or "Bottom of the Economic Pyramid," and refers to the low income strata of developing countries on an annual income of no more than 3,000 USD. Businesses that incorporate this strata as consumers, manufacturers or distribution related personnel are defined as BOP businesses.

While a corporate activity that pursues profit, BOP businesses also simultaneously focus on contributing solutions to social issues such as poverty. In Japan too interest has increased rapidly in recent years.

According to the latest IMF data, the per capita GDP of Vietnam in 2014 was 1,381 USD and almost all of Vietnam's population falls into the BOP layer.

Similarly, the poverty line as published by Vietnam's statistics bureau in Diagram 3, was, in 2004 in urban areas, an income of 218,000 VDN/month/person rising to 500,000 VND/month/person by 2011-2015, and although citizens' incomes are improving rapidly, as Diagram 4 shows, while the ratio of the poverty layer improved from 2004 to 2010, in recent years the proportion has unfortunately increased.

Likewise, viewed by region comparing the areas around Ho Chi Minh and Hanoi with other regions, it is evident that there is a major discrepancy in the ratio of the poverty layer.

The Government's	s poverty lines(Month	y income per VND)
	Urban	Rural
2004	218,000	168,000
2006	260,000	200,000
2008	370,000	290,000
2010	450,000	360,000
2011-2015	500,000	400,000

Diagram 3: The poverty line in Vietnam

Source: RESULT OF THE Vietnam HOUSEHOLD LIVING STANDARDS survey 2010

The poverty rate(Unit: %)					
	2004	2006	2008	2010	2011-2015
WHOLE COUNTRY	18.1	15.5	13.4	10.7	14.2
	Urban - Ri	ural			
Urban	8.6	7.7	6.7	5.1	6.9
Rural	21.2	18.0	16.1	13.2	17.4
	6 region	ıs			
Red River Delta	12.7	10.0	8.6	6.4	8.3
Northernmidland and mountain areas	29.4	27.5	25.1	22.5	29.4
North Central and Central coastal areas	25.3	22.2	19.2	16.0	20.4
Central Highlands	29.2	24.0	21.0	17.1	22.2
South East	4.6	3.1	2.5	1.3	2.3
Long/Mekong River Delta	15.3	13.0	11.4	8.9	12.6

Diagram 4: Ratio living below the poverty line in Vietnam

Source: RESULT OF THE Vietnam HOUSEHOLD LIVING STANDARDS survey 2010

The livelihoods of people within the BOP layer cannot obtain adequate infrastructure, educational opportunities or employment opportunities, and not only are incomes low but their living environments are also poor.

The BOP layer cannot become market consumers because they are on low incomes and cannot

make purchases, and if they are not incorporated into the value chain of the production and distribution of BOP businesses then there is no potential for the BOP layer to become consumers.

The government of Vietnam is planning to shift the citizens of the BOP layer from the large number existing as laborers in agriculture, forestry and fishery to industry and services, has proclaimed the objective of becoming an industrially advanced country by 2020, is implementing calculated countermeasures, and is promoting approaches to elevate the nation. Hence, since the improvement of human resources is a challenge in becoming an industrially advanced country, at present the employment training service of employment training schools targeting the BOP layer is being provided over a broad area.

2.5 Educational situation in Vietnam

The educational system in Vietnam was established in 1989 and kindergartens, primary schools, junior-high schools, high-schools, colleges, universities and graduate schools were setup as educational institutions.

The Ministry of Education and Training formulates national education policy and sets down curriculum standards for all educational levels, draws up examination guidelines, certifies qualifications and degrees, provides school facilities and equipment/materials and supervises state education in provinces, cities, towns and villages, and consists of organizations such as shown in the diagram below.

The schooling situation in Vietnam is a schooling rate of 94.8% at primary schools, 83.8% at junior-high schools, 54.7% at high-schools, and a progress rate of around 20% onto university studies. In Vietnam, in relation to primary education, the education system is well-maintained across the country, and the numbers and number of schools increases year on year. As per Diagram 12, in academic year 2011-2012, of the 7,100,950 students in Vietnam's primary education, 7,061,633 students studied at state schools, and 39,317 at private schools (There are 15,337 primary schools in Vietnam), with the majority of students at state schools.

3. Market trends in the education field

To gather basic information necessary for future BOP businesses, market research has been conducted to survey the state education situation in Vietnam, realities of the education business, employment situation of teachers and lecturers, and living standards and preferences of the BOP layer. More specifically, as focus areas, market research was conducted in three sites in the city areas, regional cities, and rural areas respectively of the north, central and southern regions (nine sites in total), information on Vietnam as a whole was gathered using questionnaire surveys, the following results were produced, and information necessary to future business development was acquired.

3.1 Survey methods

A questionnaire survey was conducted of Vietnam's state education situation, realities of the education business, employment situation of teachers and lecturers, and living standards and preferences of the BOP layer.

As focus areas, market research was conducted in three sites in the city areas, regional cities, and rural areas respectively of the north, central and southern regions.

Region	City name
	Hanoi
North	Haiphong
	Northern agricultural region
	Da Nang
Center	Hue
	Central agricultural region
	Ho Chi Minh
South	Can Tho
	Southern agricultural region

Diagram 5: Regions subject to market research

The questionnaire subjects were, as per the list below, five subjects from persons responsible within the municipality, and 30 subjects from among the Principals, teachers, parents, and students who were interviewed.

Table 2: List of survey targets

Unit: person

Province/City	Managers at District/Commune levels	Managers at school level	Teachers	Parents	Students	Total
Ha Noi	5	30	30	31	31	127
Hai Phong	5	30	30	30	30	125
Hue	- 4	30	30	31	30	125
Da Nang	8	30	30	30	31	129
HCM City	5	30	30	30	30	125
Can Tho	5	30	30	30	30	125
Total	-32	180	180	182	182	756

Diagram 6: No. of interviewees from each of the market research areas: From original market research

3.2 Survey Results

million

Total

Percentage

Percentage

Quantity

46.67%

100.00%

① Teacher satisfaction with monthly income by region

The results of this survey were that the most common monthly income is 5-6 million VND/month, which accounts for 30% overall. Likewise, no major income gap between regions was seen, and we understood that teachers' incomes are uniform across the country.

Table 9 - Information about teachers' monthly income by province

33.33%

100.00%

30

Quantity unit: teacher Hai Can Ha Noi Hue Da Nang TP HCM Total Phong Tho Quantity 0 1 0 0 1 1 3 2.6 - 3million Percentage 0.00% 3.33% 0.00% 0.00% 3.33% 3.33% 1.67% 4 4 5 0 8 25 Quantity 3 - 4 million 13.33% Percentage 16.67% 0.00% 13.33% 26.67% 13,33% 13.89% Quantity 2 5 10 8 10 42 4 - 5 million 16.67% 33.33% 26.67% 23.33% 33.33% 23.33% Percentage 11 11 11 Quantity 14 5-6 million Percentage 30.00% 46.67% 36.67% 16.67% 36.67% 36.67% 33.89% Quantity 14 10 4 49 Over 6

Diagram 7: Teachers' income situations in all regions: From original market research Similarly, when teachers' satisfaction with their monthly incomes was investigated, despite some regional variation, since more than half were not satisfied with their monthly income it is possible they would be interested in taking up additional work outside of class hours.

16.67%

100.00%

30

30.00%

100.00%

30

23.33%

100.00%

30

13.33%

100.00%

30

27.22%

100.00%

180

Table 10 - Teachers' opinions on their income

Quantity unit: teacher Other Plentiful Sufficient Insufficient Total opinion Quantity 0 14 16 0 30 Ha Noi Percentage 0.00% 46.67% 53.33% 0.00% 100.00% Quantity 0 27 30 0 Hai Phong 0.00% 0.00% 10.00% 90.00% 100.00% Percentage Quantity 0 16 14 0 Hue Percentage 0.00% 53.33% 46.67% 0.00% 100.00% o 8 21 1 30 Quantity Da Nang 0.00% 26.67% 70.00% 3.33% 100.00% Percentage 0 16 14 0 30 Quantity HCMC 53.33% 46.67% 100.00% Percentage 0.00% 0.00% 2 9 0 30 Quantity 19 Can Tho 63.33% 100.00% Percentage 6.67% 30.00% 0.00% Quantity 2 76 101 1 180 Total Percentage 1.11% 42.22% 56.11% 0.56% 100.00%

Diagram 8: Teachers' satisfaction with income in all regions: From original market research

2 Economic situation by region

Looking at the subsistence level by region, in the major cities such as Hanoi and Ho Chi Minh, there are many homes on high incomes, and incomes are lower in mid-sized cities such as Can Tho and Hue.

We understood that the target BOP layer in this survey (USD 3,000/year) was roughly half of the overall survey focus.

Quantity unit: household Province Ha Noi Hai Can Da Nang Hue HCMC Total Economic Poor Quantity 0 0 0 0 1 0% Percentage 3.6% 0% 0% 0% 0% 6% o 0 0 Nearly poor Quantity 1 0% 0% 0% Percentage 0% 0% 3.4% 6% O 6 Quantity 0 Percentage 0% 0% 3.4% Average Quantity 20 20 25 134 Percentage 71.4% 80.0% 71.0% 79.3% 66.7% 83.3% 75.3% Good Quantity 6 36 21.4% 13.3% 22.6% 17.2% 30.0% 16.7% 20.2% Percentage Income 2-2.5 mil Quantity 1 1 4 1 2 10 1 VND/month 12.9% Percentage 3.2% 3.3% 3.4% 3.3% 6.7% 5.5% 2.6-3 mil VND/month Quantity 2 11 Percentage 6.5% 6.7% 3.2% 6.9% 3.3% 10.0% 6.1% 0 3-4 mil VND/month Quantity 1 0 6.7% 6.5% 13.8% 0% 5.0% 3.2% 0% Percentage Quantity 26 Percentage 12.9% 20.0% 13.3% 14.4% 31 8 Percentage 16.1% 13.3% 19.4% 10.3% 16.7% 26.7% 17.1% over 6 mil VND/month 18 17 13 94 Quantity 17 14 15 58.1% 51,7% 56,7% 45.2% 56.7% 43.3% 51.9%

Table 15 - Household economic status by province

Diagram 9: Economic situation by region: From original market research

3.3 Discussion of survey results

We conducted the market research this time and below describe the BOP business potential.

- •In this market research of the whole of Vietnam, of the 90 schools in which the interview survey was conducted, at least 80% of schools had no science research facilities, and although equipped with the minimum of materials/equipment, this is only to a meager level, so Gakken's science experiment equipment has great potential.
- For teachers to engage individually in projects and earn additional income is prohibited, but under the school's direction it is possible to participate in extra-curricular classes and receive an income. Since at present due to insufficient teaching hours salaries are low and there is dissatisfaction with monthly incomes, there is a very high need to request extra-curricular class lecturers.
- Although teachers are very interested in extra-curricular activities after school, they did not show interest in working as home teachers in activities removed from the school, so it was better to think up

activities limited to the school.

- Parents are willing, for their children's sake, to let them participate in extra-curricular classes after school, and there is a need.
- Under current legislation in Vietnam, since the rules are unclear regarding paid extracurricular activities at state schools, it falls under the approval system and hence it is not totally possible.
- At private schools, with the Principal's permission it is acceptable to conduct extra-curricular classes after school, and since the system is very liberal, there is great potential for holding science experiment classes that target private schools.
- Regarding the education program at state schools, if permission is obtained from MOET and the local education committee, additions are possible so there is also potential to request the Science Experiment Classes through this process.

4. Pilot project

In order to pursue the potential for introduction as extra-curricular classes at state primary schools, the plan was to receive permission from MOET and implement the project jointly with local partner companies.

Under that plan, just after starting the survey from April 2013, approval was obtained for the MOET pilot project, and we engaged in the survey as a priority task of a company survey of potential pilot project cooperation and post-survey business partners.

4.1 Permission negotiations with MOET

Via the JICA Vietnam project office we had a meeting with the Head of the MOET Primary School Bureau, and negotiated on conducting the pilot project. As a result, the conclusion was that MOET's permission could not be obtained.

This survey demonstrated that when entering Vietnam's state education as a business, rather than getting permission and approval from the principal body of MOET (from the top down), it is necessary to get permission and approval from each region and each district in sequence (from bottom up). Government agencies in each district and each area directly control the schools in that region, and the decision making power to implement the project on those respective scales lies with the individual agency. Results on the ground need to be accumulated for projects that are conducted by private companies not based on an agreement between the two countries.

4.1.1 Sequence of the permission negotiations with MOET

In April 2013 after the start of the survey, negotiations were conducted as per the following steps:

- ① On introduction from the JICA Vietnam office, a meeting with the MOET primary school bureau
- ② Application/obtaining permission of demo class from MOET
- ③ Permission from MOET, and conducting a demo class along an original channel
- 4 Obtaining application permission to conduct the pilot project based on the evaluation report of the demo class
- (5) Abandoning the implementation of the pilot project at state primary schools through MOET

4.1.2 Obtaining permission from MOET

We submitted a proposal in English and Vietnamese summarizing the details of the development of this project.

Subsequently, a demo class was conducted and we submitted a report summarizing feedback from the schools, and although we worked to obtain approval from MOET the project was ultimately abandoned.

As a conclusion, projects that will be implemented with MOET's permission will be state projects that have no potential to become businesses run by private companies. The state needs to secure a budget and provide a program free of charge.

Hence, apparently large scale pilot projects need to be implemented and superior verification was required.

From this conclusion, the business model was altered to one providing the service of

extra-curricular classes after school in which private businesses can participate. This will not incorporate the school curriculum, and will not affect the curriculum set out by MOET. Hence, not all students will be subject to it, and students will choose of their own (guardian's) volition whether or not to take the classes. Extra-curricular classes for subjects such as English, painting and gymnastics are already conducted using vacant classroom available after school at state primary schools.

The process in this instance is as follows:

- 1. Vietnamese company explains to DOET or DOE the details and implementation methods of the program and applies to propose the project as extra-curricular classes to the schools.
- 2. Permission is obtained from the supervising authorities
- 3. Vietnamese company takes the certificate of permission and makes a presentation at each school.
- 4. Through a demonstration class and explanatory meeting at the schools, if the school grants permission, it will be possible to implement the project providing the extra-curricular program using the school facilities after school.
 - Negotiate with each school regarding the implementation environment and conditions at the school.
 - From the school's perspective, since utmost priority is given to the parents' opinions, feedback about explanatory meetings with parents and demo classes for the children is important.

4.2 Meetings with partner companies

In order to implement the pilot project and survey of local partner companies that will implement the project after the survey, there were many meetings and negotiations with public companies and private corporations conducting education projects in Vietnam.

From prior experiences in other countries and taking the project plan in Vietnam into account, initially we deliberated on selecting the state run education publishing company VEPH as the prime candidate. Towards embarking on the business, although consent was reached more or less, due to various reasons and conditions there was no agreement and the project was abandoned.

Ultimately, a partnership was entered into with Company A which performed the market research, and it was determined that a pilot study would be conducted.

4.3 Implementation of pilot project

The pilot project was implemented as per the following target values:

- Scope of implementation: Within Hanoi City
- Implementing schools: Around ten private and public primary schools
- Duration: Over a two month period from May to September 2014 at each school (the start periods differed respectively)

(We also planned to conduct the project as a summer school program during summer vacation)

> Implementation methods: Instructor dispatch

For the pilot project, personnel will be secured from Gakken and the partner corporation, who will be dispatched to the schools to conduct the classes.

Training period: May 2014

4.3.1 Project specifications

1. Class hours and number of themes

Under the Gakken Science Experiment Classes pilot project, of the total of 30 themes, we provided content of three themes over six classes.

The class time for a single class will be 90 minutes.

The contents of each theme are as below:

A1 MA: A surprising experiment with air

A2 DE: An experiment with the secrets of magnets

A3 NOHI: An experiment with the secrets of sound

2. Objectives

The objectives of implementing the Gakken Science Classes pilot project in Hanoi are:

- To implement an actual lesson of the Science Experiment Classes in Hanoi, and gather information on the mechanism as well as general information
- To ascertain the actual hopes and needs of schools, parents and children as regards the Gakken Science Classes

The data gathered through implementing this pilot project will be used as the basic information on which to construct a business model for the Gakken Science Experiment Classes in Vietnam.

3. Details of the survey content

The information gathered through implementing the pilot project was as follows:

- a) Survey of students participating in the Gakken Science Experiment Class pilot project
 - Satisfaction of students who participated in the pilot project
 - Student needs at the time of implementing the Science Class with a business objective
 - What students think about the appropriateness of the venue to implement the science Classes
- b) Survey of parents that participated in the Gakken Science Experiment Classes pilot class
 - Information on the extra-curricular classes that their own children take
 - Evaluation of the mechanism and content of the Gakken Science Experiment Classes
 - Needs survey of whether parents will allow their children join the Gakken Science Experiment Classes after the project has been deployed
 - Selection of a venue to implement the Gakken Science Class
 - Opinions on the schedule for implementing the Gakken Science Class
 - Survey of payable course fees
- c) Survey of schools implementing the Gakken Science Experiment Classes pilot class
 - School evaluation of the mechanism and content of the Gakken Science Experiment Classes
 - Regarding science instruction at the schools
 - Regarding the science classes implemented by primary school teachers
 - Regarding the method of implementing the Gakken Science Experiment Classes as an extra-curricular class based on current legislation
 - School's opinions on suitable course fees for the Gakken Science Experiment Classes

4. Implementation methods

a) Design of the evaluation sheet

We created an evaluation sheet (questionnaire) based on the information required to be gathered in implementing the Gakken Science Classes Pilot class. We created content for the respective evaluating subjects (students, parents, schools).

b) Survey of students and parents

We distributed evaluation sheets during the final class to all students who participated in the pilot class. The students submitted this evaluation sheet to the instructors after the end of the final class.

The evaluation sheets for the parents were distributed to the students at the end of the 5th class for them to take home. Parents then filled in their opinions. The students then submitted the completed parentsparents' evaluation sheets to instructors on participating in the 6th class.

c) School survey

The school surveys were conducted in direct talks with the Principal or Vice-Principal of the school implementing the pilot class, and information was gathered.

4.3.2 Overview of the results of the Pilot Project

The introduction of the pilot projects was implemented focusing on primary schools in Hanoi (Target: 10 schools).

However, since the pilot project started late in respect to school opening periods in Vietnam, and since the Ministry of Education and Training of Hanoi prohibited students from gathering in schools before July 15th, 2014, due to these two factors the pilot could not be started at schools from June.

Hence, rather than implementing the project only at schools, we contacted the guardian groups and sought a different venue to implement the classes. For this reason implementation at schools was deferred until the implementation period permitted by the Ministry of Education and Training of Hanoi, and we embarked on a format of implementing the pilot classes outside school.

In addition to the two models above, it was determined that the pilot project would also be implemented at venues such as the Hanoi Study Center. During the implementation of the pilot classes outside school, since it would have been difficult to continue to cover all the themes, we narrowed the themes to a feasible scope and implemented the classes. In doing so we gathered opinions from students and parents. This is the form of the trial classes, for which we used differential notation in this report form.

1. Implementation of pilot classes at primary schools

a) Approach towards the schools

One crucial objective of implementing this pilot program is to find an appropriate method to introduce the Science Experiment Classes to schools in Vietnam. Therefore during the implementation this time we approached schools through two methods.

◆ Direct negotiation with schools

Case at state primary schools

In the direct negotiations with schools for the introduction of the Gakken Science Experiment Classes, official permission documents are required from the Ministry of Education and Training managing the schools in each region. Although we negotiated with the regional agencies of the Ministry of Education and Training, we were unable to obtain documentation satisfying the criteria during the implementation period of the pilot project, and were unable to receive official permission to implement the pilot classes.

Case at private primary schools

At private primary schools, the implementation of extra-curricular classes is managed through the administration of the respective school. We received very cooperative consideration and treatment regarding our proposal to implement the pilot classes.

◆ Approach to the parents' group (PTA)

In order to obtain permission from the schools to implement the Gakken Science Experiment Classes pilot classes, the role of the parents (in particular the PTA representatives) was very important.

- b) Results of implementing the pilot classes at schools
 - ◆ Schools at which the pilot classes were implemented: six schools (State: four schools, Private: two schools)
 - ◆ Total number of students: 239 students (boys: 134, girls: 105)
 - ◆ School years of participating students:

No.	Age (school year)	No. of Students
1	Born in 2007 (age 7) - Second graders	83
2	Born in 2006 (age 8) - Third graders	62
3	Born in 2005 (age 9) - Fourth graders	54
4	Born in 2004 (age 10) - Fifth graders	40
	Total	239

Diagram 10: Primary school implemented pilot classes - Number of participating students by school year

■ Born in 2007 (age 7) - Second graders

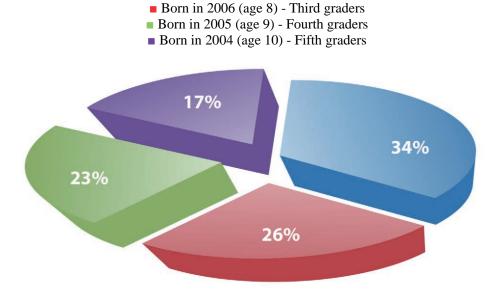


Diagram 11: Primary school pilot classes implemented - Ratio of participating students by school year

4.3.5 Student evaluation of the pilot project

This information was questionnaire data summarized and analyzed from the responses of children who participated in the pilot classes implemented at schools and facilities outside the schools.

1. Evaluation of the Gakken Science Classes by students participating in the pilot project

In order to gather evaluations from the students, we had the students give responses to the three questions below using the questionnaire we created.

From the results of questionnaires of 281 students, many students gave positive evaluations and expressed a clear interest. The table below shows the results to the questions above.

Diagram 12: Student reflections [Question 3]

Question 3	No. of	Datio (%)
Were the science Classes fun?	students	Ratio (%)
Response 3a - A lot of fun	215	76.5%
Response 3b - Fun	43	15.3%
Response 3c - So-so	20	7.1%
Response 3d - No	3	1.1%
Total	281	100%

Diagram 13: Student reflections [Question 4]

Question 4 Will you talk to your parents and friends about the experiments in the science classes?	No. of students	Ratio (%)
Response 4a - Talked about it right away	125	44.5%
Response 4b - Talked about it	126	44.8%
Response 4c - Did not talk about it	30	10.7%
Total	281	100%

Diagram 14: Student reflections [Question 6]

Question 6 Were the science classes useful for understanding scientific principles?	No. of students	Ratio (%)
Response 6a - Useful	231	82.2%
Response 6b - A little	44	15.7%
Response 6c - Not useful	6	2.1%
Total	281	100%

As we can see from the above data, most students were satisfied with the content and instruction methods of the Science Classes. When launching future projects, in terms of market needs it is fair to say that this is a good trend.

2. Content of the Science Classes that was most attractive to students

Areas that were most appealing within the Science Classes are important in terms of clearly indicating the strengths of the program.

Of the 340 students who responded, 138 responded with No. 3, the experiment using equipment for students. This was 40.6% overall, and next most common were the experiments conducted with the instructor (123 students/36.2%).

The table below shows the response results for "Question 5".

Diagram 15: Strengths of the Science Classes

Question 5 Which of the following areas of the Science Classes was the most fun?	No. of students	Ratio (%)
Response 5a - Watching the experiments the instructor conducted	54	15.9
Response 5b - Experiments conducted with the instructor	123	36.2
Response 5c - Experiments using the equipment for students	138	40.6
Response 5d - Creating reports after classes	25	7.4
Total	340	100

Many students responded 5b and 5c implying that there are problems with the theory based study methods on which mainstream textbooks are currently based in Vietnam. In Vietnam's primary school classes, there is inadequate handling of enjoying hands-on experiments and studies.

3. Confirming student needs as regards the Science Classes

Essentially, the direct clients of the Science Classes are the students. Therefore, it is important to

ascertain student needs and this need to be considered in order to create a business model in Vietnam.

Diagram 16: Student needs as regards the Science Classes

Question 7		
Do you wish to participate in the Science Classes next time	No. of students	Ratio (%)
also?		
Response 7a - Yes, very much	167	59.4
Response 7b - Yes	41	14.6
Response 7c - Need to ask parents	69	24.6
Response 7d - No	4	1.4
Total	281	100

4. Venue for holding the Science Classes (student wishes)

The venue is an important factor in the students' decisions whether or not to take the classes. Primary school students particularly in major cities study mostly via a two-part system at present.

Hence, extra-curricular classes such as the Science Classes need to be conducted in the afternoon after school from 4 p.m., or at weekends.

Diagram 17: Suitable venues for the Science Classes

Question 8		
If the Science Classes were to continue, which classrooms	No. of students	Ratio (%)
would you choose?		
Response 8a - After classes/at school	107	38.1
Response 8b - Weekends/at school	63	22.4
Response 8c - Gakken Center (facility outside school)	81	28.8
Response 8d - Shopping mall	20	7.1
Response 8e - Other	10	3.6
Total	281	100

Students who responded by selecting 8a indicated there is still demand and availability to participate in extra-curricular classes between school finishing and their parents coming to collect them by car.

4.3.6 Parents' evaluation of pilot project

Of the parents of the 281 students to which the questionnaires were distributed, questionnaire responses were only obtained from 70 people (around 32%). The statistics and analysis below summarize the data of the results of the questionnaires from those 70 people.

1. Information on enrichment lessons that students currently participate in

Diagram 18: Children taking enrichment lessons

Question 1		
Do you send your child for enrichment lessons other than	No. of parents	Ratio (%)
the Science Classes?		
Response 1a - Yes.	61	87.1
Response 1b - No.	9	12.9
Total	70	100

At least 87% of parents responded that they make their children take enrichment lessons including skills development and English. Viewed in terms of this figure, we can see that parents are investing money in their children's education.

4.3.7 School evaluations of the pilot project

1. Evaluation from schools implementing the Gakken Science Classes pilot

In an exchange of opinions with members from schools implementing the Gakken Science Classes pilot classes, the schools' evaluation of the program were positive on the whole. The schools believe that instruction methods centered on the experience-based studies and independent learning of the

Gakken Science Classes have major value. Likewise, there were many opinions that one strength of the program is that educational materials for individual use are supplied for each theme.

However, the schools had several concerns regarding the content of the curriculum:

- Are the 36 themes of the Gakken Science Classes categorized according to the comprehension levels of children of different ages?
- If the Gakken Science Classes are implemented with content for Primary School students, from which school year will it start?
- Are you able to provide a quantitative program evaluation tool for the Gakken Science Classes?
- Is it possible to align the class hours of the Gakken Science Classes with the Vietnam Primary School standard of 35 minutes?
- At present 90 minute classes are the Gakken standard; if they are introduced to the school curriculum they must be aligned with the class hour of 35 minutes.
- Gakken's three-step class structure is a very difficult style for 1st and 2nd graders. One particular challenge will be completing reports each time within class hours.

If the project is rolled out at schools, proposals to resolve the above concerns will make the product easy to handle for the school clients. These opinions must be referred to when considering the business model and strategy.

2. Issues within the current science education at primary schools

Within the primary school education curriculum currently stipulated by the Ministry of Education and Training, science as a subject is studied only by 4th and 5th graders for two periods (35 minutes each) a week. Science is taught by the Vice-Principal, and the method of instruction is based on a textbook and does not utilize experience techniques such as experiments. At state schools, particularly before exams, science classes are omitted and that time is allocated to core subjects such as mathematics and the Vietnamese language.

Science is handled in this way as it is not thought to be a core subject. Hence, science results are not evaluated within a student's results.

Contrasting with state primary schools, private primary schools view science education as important. Private primary schools strive to create a very modern study environment, so as to align with international standards.

5. Regarding price (opinions from the schools)

When we inquired about an appropriate price for the Science Classes in the event of two classes per theme (including individual teaching materials), a quarter of state primary schools proposed a clear figure. According to the Vice-Principal of K Primary School, in order to appeal to the parents and students of the school, the one-off course fee needs to be no more than 120,000 VND. The other schools responded that the cheaper course fees, the better.

4.3.8 Conclusions on the implementation of the pilot project

Based on the information gathered during the implementation of the Gakken Science Classes pilot project, we understood the following and will construct a business model.

- Almost all students showed a great deal of interest in the Gakken Science Classes, and are willing to continue if it is actually implemented.
- Many parents are very satisfied, and are looking forward to the actual implementation of the project in Hanoi.
- The preferred venue for the Gakken Science Classes is in the form of extra-curricular classes after school.
- From the market, the implementation schedule requested most was at the pace of once weekly 90 minute classes.
- The market-appropriate price and conceivable course fees were clear, which provided a hint to creating a business model.
- In order to implement the Gakken Science Classes at state primary schools, it is necessary to receive permission from the Ministry of Education and Training of Hanoi. After obtaining licenses for the course fees share scheme, negotiations will be held with the respective schools.

5. Verification of the Business Model

5.1 Business Plan in Vietnam

5.1.1 Partnership with Local Company

Regarding the partnership with local company, which was considered at the beginning of this study, our investigation into the workings of educational service business in Vietnam confirmed that we need a powerful partner who can approach and negotiate with governmental agencies.

We also found through discussion with various local companies that different companies have different strong points. It is important that the partner can act as a coordinator so that these strong points need to be fully utilized. We have identified Company A, which was the counterpart in this study, as the candidate partner company, and are now in the process of negotiation with this company. We plan to enter a license contract with Company A to entrust it with the operation in Vietnam. In particular, we expect the company to take charge of negotiation with key organizations and persons, securing appropriate human resources, and other coordinating services.

On the other hand, Gakken will provide operating know-how, teaching materials, and personnel training. In conducting promotional activities, it will work jointly with the partner in developing marketing strategies and planning and conducting events, as well as dispatch personnel and share costs.

The reasons for choosing Company A as the partner include the following.

- Through its consulting business, the company have full knowledge of the workings of educational service business in Vietnam, including educational service markets and laws.
- Because it already has a franchise in preschool business, it has operating experience such as how to launch business in educational services.
- It has a mid-term plan to expand its educational service business from preschools to include primary schools, junior high schools, Japanese language education, etc.
- It has strong connection with the Senior Vice Minister of Education and Training and the chiefs of subordinate bureaus. It also has a network of contacts to other governmental organizations.

On the other hand, there is a risk because the capital of the company is relatively modest, and large investment may not be possible at the time of business launch. Therefore, it may take some time before the business is established.

5.1.2 Business Plan

As a result of negotiation with government agencies and the performance of the pilot project in this study, it became clear that the realization of business targeting the BOP group in Vietnam will require a change of direction in our approach and a shift to stepwise expansion of business. We develop a business plan for the future based on the mechanisms and needs identified through the performance of the pilot project.

[Direction of Business in Vietnam]

As the first step of business in Vietnam, we start operation in Hanoi.

The main direction of business is to follow the four steps described below.

The pillar for future expansion of business will be ③ introduction to the extra-curricular classes at public primary schools. However, at the launch of business, steps from ① to ③ will be pursued in order mentioned in overlapping schedules.

- ① Establishing a learning center outside of schools
- ② Introduction to private primary schools: introduction to extra-curricular classes or curricula at private primary schools
- ③ Introduction to public primary schools: introduction to extra-curricular classes or curricula at public primary schools
- 4 Marketing support model

As described later in greater detail, establishment of a learning center outside of schools will enable us to showcase the business. Because different schools, private or public, have different situations, it may not be possible to provide services in certain areas even if there are potential customers. Priority

should be given to the establishment of facilities that play a complementary role in such situation. Because private primary schools can independently make decisions on the introduction of our program, commencement of business there is expected to become possible earlier than that in public primary schools. As the performance at these schools will be submitted to relevant governmental agencies as part of information supporting approval and permission, we need to start promotional activities early. Thereafter, we seek for business licenses (permissions) at public primary schools and move to the next step with expansion of business.

[① Establishment of a Learning Center Outside of Schools]

Description

- We establish a learning center that will be operated directly and serve as the base for the business as a whole.
- Because introduction to private and public schools will be impeded by some barriers, we establish
 facilities for educational services outside of schools in the areas where we cannot provide services
 at schools.
- We develop a model for our future proposal of packages and business models in franchise business.

In conducting the pilot business, we noticed the presence of parent groups. These groups may let their children attend classes outside of schools, if they recognize the value, and may also support short-term learning courses. The center serve as the institution that provides services outside of schools as a means to acquire these potential customers. The learning center will be a place resembling to a cram school in Japan.

Purpose 1: Promotional Activities

Trial classes will be offered focusing on a limited range of themes. The offer of trial classes for free or at low cost is intended to expand publicity in general markets. Delivery class services are provided by personnel sent from this institution. In the case where it is difficult to conduct a class at a school, students are invited to this facility and attend classes. The feedback from parents and students on these classes will be presented to schools so that we can obtain permission from schools.

Purpose 2: Development of Human Resources

In addition to the above-mentioned promotional purpose, the learning center will also be a base for instructor training. Training according to manuals alone can hardly achieve development of the ability to provide services that satisfy customers. A training facility within the actual site of teaching will complement training based on theories with that supported by experience.

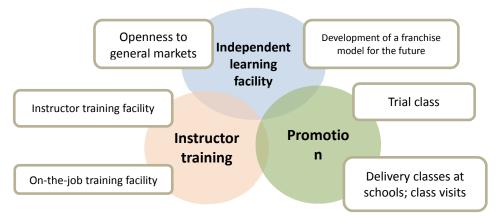


Chart 19 Concept of a Base Facility

Problems

Renting a facility will incur fixed expenses. In this case, we need to consider the profitability of the learning center per se in the perspective of its role within the business as a whole. We are therefore considering whether we should rent a new facility or ask for cooperation in the partial use (in time and space) of a facility owned by a cooperating company (a third party).

[② Introduction to Private Primary Schools]

Description

- A business providing educational solutions making use of school infrastructure.
- Individual schools can decide on the introduction of external educational programs to complement what school the curriculum cannot offer. We approach and have business talks with schools.

We directly approach private primary schools, which can decide on the introduction of external educational programs on their own discretion. As the result of this study showed that some schools are not willing to incorporate extra-curricular classes, we need to develop business models considering the blending into the curriculum of each school.

Because the number of private primary schools in Vietnam is small, this will not represent a large part of the business. It will only serve as a first foothold in Vietnam in the initial stage.

Purpose

To create a precedent of business in Vietnam and provide the record of performance. To serve as a tool for approval of extra-curricular classes at public primary schools.

Problems

There is a company promoting extra-curricular classes at private primary schools in the subject science. As we need to compete with this company, we must emphasize our strong points and differences, as well as implement measures to counter players that may be a threat.

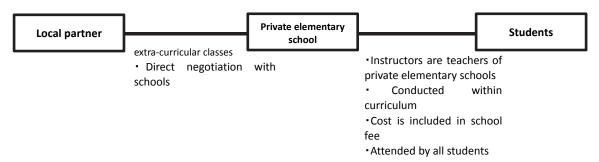


Chart 20 Concept of Introduction to Private Primary Schools

[3 Introduction to Public Primary Schools]

Description

- A business model of extra-curricular classes making use of school infrastructure, similarly to that at private primary schools. This business model already exists in the form of extra-curricular classes in languages, arts, physical education, etc.
- Our approach begins with obtaining permission from the local offices of the Ministry of Education and Training, followed by sales talks and negotiation with schools.

Purpose

This business model of introduction to extra-curricular classes at public primary schools will be the central part of business in the end.

Problems

Securing instructors

As the number of schools with our program increases, more instructors will be needed. There still are many school teachers who, although unauthorized by the law, are making it a side business to teach groups of students at the teachers' home in a cram school setting. In this situation, how much approval we can obtain from school teachers is expected to vary depending on locality. To secure instructors in this context, we need to develop a system for recruiting by our company. Building such mechanism in places other than large cities like Hanoi is considered a challenge in the future.

Future Processes

Phase 1 (up to 1/2 year)

We apply to DOE for approval limiting our scope to a part of Hanoi City. We discuss with the partner company regarding whether or not a report of needs and feedback can be made, including the outcome of the pilot business. We formally launch the business in the form of extra-curricular classes at public primary schools, even if the scale may be small.

Phase 2(1/2 - 2 years)

After a certain level of performance has been achieved in several areas in Hanoi City, we apply to DOET for approval. Building on the performance at several sites, we try to obtain approval for introduction to a wider area. There are 700 schools in Hanoi City alone.

Phase 3(2-3 years)

We begin approaches in the areas surrounding Hanoi and other cities.

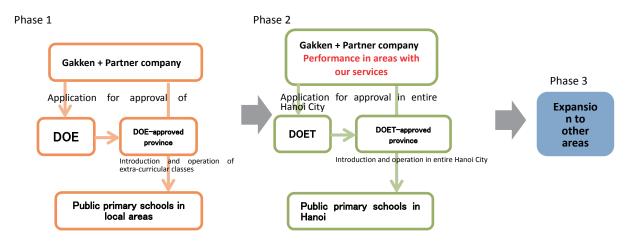


Chart 21 Flow of Introduction to Public Primary Schools

* Our service business to provide this science program at private and public primary schools in Vietnam will be conducted in the form where schools support business operation. We do not rely on the model using contracts with schools. Instead, the business will be managed by its owners (Gakken and the partner company). This decision is derived from our experience in another country, where we based our business on transactions with schools and this choice made it difficult for us to make proposals and get involved in the management of instructors, classes, and tools.

[4 Marketing Support Model]

Description

- It is difficult to collect fees for additional classes and extra-curricular classes from the BOP group living in the rural areas of Vietnam. We build a model combining education and marketing, which has been used in Japan.
- Gakken Science Experiment Classes will support materialization of activities planned by companies for marketing purposes. The fund for conducting these classes will be covered by the advertising budgets of the companies.

This model will be introduced when the above-mentioned introduction to public primary schools has achieved a certain level of success.

Our educational services will serve as a channel for advertising and CSR activities of companies based in Vietnam targeting children, who are present or future customers. This scheme becomes possible when we reach a certain level in the number of schools and the number of students.

We will provide classes and teaching materials to schools and consumers using existing contents after customization according to the requests and features of companies.

Past Performance in Japan

Case 1) Partnership with a major electric appliance manufacturer

Students understand the mechanism and principles of the manufacturer's products through science experiments. At the same time, a booklet summarizing the products and the company's actions is handed out to students to enhance brand recognition.

Case 2) Partnership with a major automobile manufacturer

Students gain better understanding through science experiments on the theme of "eco". The mechanism of business is largely the same as above.

Past performance in overseas project (Thailand)

Case 1) Partnership with a bank

Budget was secured as part of the CSR activities of a major bank. Science Experiment Classes were incorporated in the event program of the bank. This became a case of company tie-in of a different type from the cases in Japan.

Case 2) Partnership with a governmental agency

Workshops and experiment shows were conducted as booth and stage programs during the science fair held yearly by the government.

Case 3) Partnership with a publisher

Science Experiment Classes were held as an event program when the company visited schools in various areas for promotion and sales of educational publications (scientific journals, study-aid books, etc.)

Advantage of Gakken + Company Partnership

The use of a company's advertisement budget provides learning opportunities to people in communities and groups, particularly those in rural areas, lacking the ability to fully or even partially pay our tuition fee.

Advantage for Companies

Companies can promote their activities and products to children by using education as a communication medium.

Advantage for Consumers

They can have access to educational opportunities that are otherwise not affordable at low or no cost.

5.2 Verification of Feasibility

5.2.1 Market Size

We calculate the scale of potential customer base targeted by this program in Vietnamese markets. After it becomes possible to provide services satisfying the market needs identified by the market study and the pilot project at appropriate market prices, we conduct analysis to grasp the market size in entire Vietnam and that in Hanoi City, which is our target in phase 1.

Because the target customer group is primary school students, important indices showing the general situation are the current number of schools and students.

As of 2012, there are 15,337 primary schools (15,243 public and 94 private primary schools) in Vietnam. The total number of students are 7.10 million (7.06 million public and 40,000 private primary school students).

Hanoi City, where the project will be launched, has about 700 schools attended by 560,000 students.

Although the information from the pilot project conducted in a small scale may not be regarded as fully representative sample data, we base our discussion on these data at this point in time.

More than 70% of parents and students participating in our classes indicated their willingness to continue attendance. However, about 59% of students definitely wanted to attend and 37% of parents

definitely wanted to have their children attend our classes. Because the use of classes for primary school students strongly reflect the wishes of parents, we estimate the market size based on the fact that 37% of parents definitely wanted to have their children attend our classes. While 281 students participated in the pilot project, answers to our questionnaire were obtained from 70 parents, showing a response rate of about 25%. This figure must also be considered an evaluation of this program. Therefore, assuming that 37% out of the 25% of all participants supported our program, approximately 9% is considered an appropriate estimation.

In addition, the choice of places for the provision of services is an important factor in grasping the needs of parents and students. We plan to provide our services mainly at schools in after-school hours, and the needs for such services are high among students and parents. The result of questionnaire showed that about 40% of students and about 50% of parents preferred classes at schools in after-school hours. Here, we also adopt the opinions of parents.

Based on these results, if we consider only content evaluation and needs, about 4.5% of all target population are potential customers in an urban area such as Hanoi.

To gain as many actual customers as possible out of these potential customers, services must be provided so that pricing and business model configuration match the needs of schools and customers as closely as possible.

In the initial proposal, we assumed that teaching materials are shared by several students rather than supplied to individual students, and hence pricing was set at a very low level. However, the result of the pilot project indicated that a strong point of this program is the ability to supply teaching materials to individuals. A revision of pricing must be made taking this point in consideration.

In the pilot project, most parents answered that the appropriate price for a theme should be 300,000 VND or less for two 90 minute classes. This price translates to 150,000 VND per class. In addition, schools recommended a price of 120,000 VND or less per class, aiming to attract more students. This price level is popular and frequently adopted by after-school classes conducted currently at schools and attracting many students.

Considering the duration of classes at primary schools and the number of students per school class, we plan to offer 60 minute classes. We estimate the market size assuming that each theme will be covered by a number of 60 minute classes, pricing at the present is 100,000 VND/class, and each course consists of classes in 9 themes (36 classes) (9 months). We propose to schools the provision of 4 courses for students from the 2nd grade to the 5th grade.

In this case, the potential annual market size in Hanoi is estimated to be 18.144 million VND (about 90.72 million yen).

Number of students $\begin{bmatrix} \text{Expected} \\ \text{participation} \\ \text{rate} \end{bmatrix}$ Annual number of themes $\begin{bmatrix} \text{Unit price (per themes)} \end{bmatrix}$ $\begin{bmatrix} \text{Potential market size} \\ \text{Size} \end{bmatrix}$ $\begin{bmatrix} 560,000 \times 4.5\% \times 9 \times 400,000 \text{ VND} \end{bmatrix} = 90,720 \text{ mil. VND}$

Chart 22 Estimation of Potential Market Size

(about 453.6 million yen)

5.2.2 Profitability Analysis

[Market Price]

As confirmed in the pilot study, the appropriate price for classes offered at schools in after-school

hours was found to be 150,000 VND/class or less. Although further discussion with the local partner will be needed, we calculate business balances assuming pricing below the appropriate price, aiming to attract more students.

[Cost Price]

Considering teaching materials and other items needed, we endeavor to increase the percentage of procurement from domestic sources in the course of business.

[Marketing margin]

As we use school infrastructure, we need to allow schools to receive a margin. The distribution from Japan will consist of the flow: Gakken Educational \rightarrow local partner \rightarrow schools \rightarrow consumers. During the pilot project, we confirmed that extra-curricular classes at public primary schools can be realized using several models of introduction to extra-curricular classes.

Pattern (1)

Operator side: All tasks (admission procedures, fee collection, instruction)

School side: Allowing the use of classrooms, distribution of materials promoting extra-curricular classes

> Pattern ②

Operator side: Instruction

School side: Promotion of extra-curricular classes, allowing the use of classrooms, admission procedures, fee collection

Pattern (3)

Operator side: Giving classes (main instructors)

School side: Promotion of extra-curricular classes, allowing the use of classrooms, admission procedures, fee collection, providing assistant teachers

Although the above 3 patterns are considered the most important, the calculation in this report uses pattern ①. Different patterns involve different sharing of roles between us and schools, and the percentage paid to schools varies accordingly.

Because classes are basically given in after-school hours, instructors are free from work during daytime.

Although more detailed consideration will be needed concerning the type of contracts with instructors, we consider the use of performance assessment systems established in schools and communities. Therefore, we consider that admission procedures, fee collection, and student recruitment are the tasks of instructors.

[Personnel Cost]

As this project consists of provision of services, it involves the employment of people.

Personnel needed on site:

- Instructors who train instructors conducting classes
- Instructors conducting classes at schools
- Sales personnel promoting introduction to schools
- Office workers supporting business operations

The number of these personnel and related cost will change according to the change in the scale of business.

Personnel cost is estimated based on the assumption that the average wages of teachers at public primary schools is about USD 200-300/month and that of teachers at private primary schools is about

USD 400.00/month. The estimation at the present assumes wages according to the local standards.

[Incubation Cost and Training Cost]

The establishment of a center outside of schools enables us to provide training at the center, as well as on-the-job training. Although we can expect that some income may be generated at the center itself, this income will be exceeded by expenditure for fixed cost for a certain period after business launch. In the estimation at the present, we classify monthly fixed cost into incubation cost and training cost.

• Training Cost

Training cost mainly consists of the cost of travel from Japan. We assume a stay for a week during each visit.

• Incubation Cost

This mainly consists of the rent for the center outside of schools, other miscellaneous expenses, and operating cost. While the rent may vary widely depending on location, we assume about USD 2,000 for the area we need (about 50 m²), based on the usual rate.

[Promotion Cost]

The cost considered here includes the cost of leaflets distributed to students and advertising cost. At the present, we plan to minimize the cost by using SNS for notices and advertisement. The SNS site created during the pilot project has been responded by about 1,000 inquiries, despite the fact that its final upload was at the end of August. However, we still need to print and distribute leaflets and advertising materials, and the estimation also includes the cost of this activity.

[Estimation of Profitability]

Based on the above-mentioned pricing, cost prices, marketing margins, and other costs, we conducted estimation of profitability of this business. Details are omitted here.

The business will be expanded in steps, starting from the introduction to certain areas in Hanoi City and followed by expansion to the entire city in the 3rd year. Expansion to 2 areas other than Hanoi City will begin in the 4th year.

5.2.3 Risks Associated with the Conduct of This Business and Countermeasures

Risks concerning permission and approval

Because this business at the present uses the model of introduction to extra-curricular classes, it is possible to obtain business permission and approval by following appropriate processes in cooperation with the partner company. However, the responses of authorities may be different at different times and depending on the details of business. A possibility remains that we cannot obtain approval as a result of a wrong choice of procedures or approaches.

< Countermeasures >

Company A, which will be our partner company, is headed by Mr. B, who has his own network with government officials through his involvement in the business with NTT in the field of telecommunications infrastructure. Appropriate steps will be made clear by confirming the details of business and grasping the path to approval in advance.

Risks Concerning Intellectual Property Rights

This program involves teaching know-how such as teaching manual DVDs and operation know-how such as class management. Anticipated risks include copying and unauthorized use of these resources.]

< Countermeasures >

As for teaching know-how, distribution of complete copies will be prevented by periodical development of new contents and updating of information. The same will apply to teaching materials

With respect to operation know-how, we provide services that cannot be mimicked making the best use of the unique strengths of Gakken, such as sharing of cases in countries other than Vietnam and hosting contests.

Partner Risk

As the partner is entrusted with operation in Vietnam, there is a risk that the partner may become independent after acquiring our know-how.

< Countermeasures >

At the present, we are discussing a contract on the condition that a jointly-invested joint corporation must be established after a partnership period for certain duration. This provision will be included in the terms of contract.

6 Possibility of Linkage with JICA Projects and Development Effectiveness

6.1 Need for Linkage of Projects

Training of persons with skills and problem-solving abilities who can precisely respond to the needs in real society is an urgent necessity in Vietnam. In particular, the government has identified the IT field as an industry with particularly high growth and great future potential, and has been energetically promoting human resource development in this field, assigning IT education as a priority area in the Strategy for Education Development from 2001 to 2010.

Particularly in recent years, "Human Resource Development Scholarship" has been implemented in a grant-aid project, helping the development of people such as excellent young administrative officials who are expected to play central roles in administration as the planners and implementers of socioeconomic policies in the future. Building on their experience in learning in Japan, people trained in this program are now working for further strengthening of the relationship between the two countries.

In the future, the people who studied in Japan and those who were involved in JICA's technical cooperation in the past are expected to work for Japanese-owned enterprises, supporting further overseas expansion and growth of these companies.

Furthermore, we expect that there will be not only government-led human resource development but also that using knowledge and funds form the private sector, and this will facilitate further expansion of education business through government-private collaboration beyond the budgetary limitations of conventional programs.

6.2 Expected Business Schemes

In relation to the project, dispatch of advisors, dispatch of overseas volunteers, etc., we can consider the following project linkage schemes.

• JICA is conducting a technical cooperation project at Hanoi University of Science and Technology as a project to support higher education, providing opinions and experience of Japanese higher education institutions to address the problems of higher education institutions in Vietnam, such as the tendency to put excessive emphasis on the learning of theories and knowledge and the inability to provide sufficient exercises and practices due to the shortage of equipment, materials, and fund.

Although Gakken's "Science Experiment Classes" program is marketed targeting primary education institutions, it can be linked with JICA's project to support higher education institutions so that it can provide children with the opportunity to experience the places of leading-edge scientific research, potentially stimulating the motivation of people to become able to do remarkable work in international society in the future. Furthermore, the linkage between primary and higher education will support the study of more effective education programs for primary education and make it possible to return the product of such study to elementary schools.

- The information on the reality of people's life in developing countries, obtained by overseas volunteers through the linkage with Japan Overseas Cooperation Volunteers (JOCV), is valuable for the formulation of market development strategies. By promoting information exchange with JOCV members, who understand the mindset of local people and can penetrate into local communities and workplaces, we will be able to build better relationships with local partners and elementary schools.
- Through linkage with JICA's business and investment environment advisors, we can obtain information on not only Hanoi City, where we are working at the present, but also Ho Chi Minh, Danang, Haiphong, and other cities where we may operate in the future. This will facilitate further expansion of our business.
 - While grass-root technical cooperation projects are conducted in various parts of Vietnam, we

consider the possibility of linkage particularly in educational activities from a CSR standpoint, aiming at the improvement of primary education in Vietnam.

6.3 Expected Effect of Linkage

In Vietnam, about one million workers have to be moved from primary industries to manufacturing, construction, and services by 2020 as a result of future economic growth. Improvement of the level of education particularly in rural areas is essential to the achievement of this shift. It is therefore necessary to promote the involvement of the BOP population starting from primary education, to provide more opportunities for obtaining education, and to let people acquire advanced skills needed for employment in manufacturing and service industries, aiming at increasing people's income. In this context, the linkage between this BOP business and JICA projects is expected to facilitate the development of education business and contribute to the growth of Vietnamese economy.

6.4 Development Goals and Indices of Development Effectiveness

The following project goals have been set for this BOP business.

Overall Goal:

To improve the standard of living through enhancement of abilities in primary education. Project Purpose:

To help development of human resources with problem-detection and problem-solving abilities through "Science Experiment Classes" operated as a BOP business and also to create employment for the BOP population in this business.

Because the implementation of this BOP business depended on an external condition in that our activities could not be realized without the support of the Ministry of Education and Training, we cleared this external condition in cooperation with JICA before commencement of our activities.

The records of activities, interviews, questionnaires, etc. in the pilot project for this BOP business demonstrated that the performance in science contests improved, the pilot project induced positive changes in awareness, and the time spent studying increased. These results indicated that this business contributes to the development of human resources with problem-detection and problem-solving abilities among children in Vietnam.

6.5 Scenario for Manifestation of Developmental Effectiveness (Target Values)

The following target valued are set as the indices for future development goals after implementation as a commercial business.

• Employment of Teachers

The number of lecturers employed in relation to this business is increased targeting at 100 persons by 2020, aiming at creation of human resources through "Science Experiment Classes" and creation of employment in the BOP business.

• Number of Schools Participating in the BOP Business

The number of schools participating in this business will be increased targeting at 50 schools in the vicinity of Hanoi City, aiming at contribution to the development of human resources with problem-detection and problem-solving abilities among children in the vicinity of Hanoi City.

According to the above target values, we continue this business in linkage with JICA and work toward the achievement of development effectiveness.

7. Conclusion

The purpose of this study is to conduct an educational service business using the infrastructure provided in the form of schools in Vietnam and create a business model that can provide experience-based learning at low cost to the children, who are currently learning in a system with an emphasis on theories. We also expected effectiveness of this business in increasing the income of teachers working in the fields of teaching.

In this study, we first sought cooperation with the Ministry of Education and Training of Vietnam, planning business implementation at a higher level. However, in addition to the difficulty in establishing a business model for cooperation between a foreign company and the government, we found that launching a business in the places of public education is very difficult particularly in

Vietnam, which is a socialist country.

Nevertheless, the result of our market survey confirmed the presence of the 3 important facts that we assumed in the beginning, and we therefore were able to recognize the possibility of educational service business in Vietnam.

The first fact is that more than 80% of the 90 schools surveyed do not have sufficient equipment for studying science. This indicates that only textbook-based learning is conducted, and students are not experiencing the joy of learning science.

The second is that teachers are not satisfied with the present way of learning. Teachers who are paid low wages can obtain an additional income by supporting a company conducting extra-curricular classes at schools. If we can realize our business in this shape, we can receive better support from the school side.

The third is the presence of a potential market, as indicated by the fact that customers (parents and students) pay a certain amount of money for extracurricular classes and other courses outside of schools. The proportion of expenditure for education in income is relatively high in Vietnam among Asian countries.

From the above findings, we found out what are missing in the places of education and in the market, and confirmed the presence of customer needs in educational service business.

Moreover, we could confirm the mechanisms and needs in greater detail through the pilot project. We consider that a business planned according to calculation based on these results is feasible, provided that we start with a small scale in an urban area, although it may be impossible to achieve explosive expansion of business in early stages.

As described in the business plan, we will establish the business starting from the operation an urban area as the first step. Thereafter, we plan to expand the business to a second city and rural areas.

As this feasibility study defines the BOP population as having the annual income of 3,000 dollars or less, about a half of the people in Vietnam are included in the target population. However, people in the true BOP group in rural areas lack the income to paying additional money for education.

Therefore, our ultimate goal is to enhance the influence on children and parents through expansion of areas, the number of schools, and the number of students participating in this business. This will increase the advantage for companies to use this infrastructure, making it worthwhile to invest in advertising. We use the advertising budget of companies for the provision of services in rural areas, so that we can provide services to the true BOP population at very low or no cost.

The study results and desktop calculation demonstrated that we can launch the business with a certain level of success. In addition, we could identify the goal of the BOP business, which was the purpose of this study. The activities of the study team, therefore, was successful.

However, it is necessary to solve the problems that need to be addressed in the process of business launch and also the problems that were not foreseen.

Major problems we are faced with at the present are as follows. These will be solved in cooperation with the partner company, aiming at the commencement of business in March 2015.

- ① Launch of the learning center (permission, site selection, etc.)
- ② Obtaining business approval from the Department of Education and Training (DOET) office in Hanoi district
- ③ Training of instructors
- ④ Establishment of a marketing support model
- ⑤ Differentiation from competitors

Different parts of the project will be implemented in parallel. The schedule for future implementation of business is as follows.

Business in the parts from \odot to \odot will start operation in January 2015. Although the plan for \odot and \odot includes some target values, allowing for expected impact of external factors, \odot is planned

to be implemented according to the schedule shown below.

The business in the marketing support model in ④ is planned to start in 2016 at the earliest, because this cannot be commenced until the number of student increases sufficiently and the scale of business reaches a level that can offer advantage to companies.