

**Introducing Japanese Educational
Approach to the Basic Education Sector
in the Arab Republic of Egypt:
Findings and Recommendations**

July 2016

JAPAN INTERNATIONAL COOPERATION AGENCY

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HM
JR
16-051

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Abbreviations and Acronyms

CAKBE	Central Administration for Kindergarten and Basic Education
EC	Executive Committee
EJEP	Egypt Japan Education Partnership
EJS	Egypt-Japan School
GAEB	General Authority for Educational Building
INSET	In-Service Training
JICA	Japan International Cooperation Agency
MEXT	Ministry of Education, Culture, Sports, Science and Technology – Japan
MOETE	Ministry of Education and Technical Education - Egypt
PE	Physical Education
PMU	Project Management Unit
PTA	Parent Teacher Association
PTC	Parents Teachers Council
UNESCO	United Nations Education, Science and Cultural Organization
SC	Steering Committee
SBI	School Based INSET
TOR	Term of Reference
UNESCO	United Nations Education, Science and Cultural Organization
WCE	Whole Child Education

1. Project Outline

1.1 Background of the Study

H.E. Mr. Abdel-Fattah Al-Sisi, President of the Arab Republic of Egypt, has expressed his interest in utilizing the Japanese educational approach (e.g. classroom discussion, cleaning, school event, and ethical education) in Egypt to improve students' sense of ethics, discipline and team work, following the official visit of H.E. Mr. Shinzo Abe, Prime Minister of Japan, to Egypt in January 2015. Japan International Cooperation Agency (JICA) is in the position to propose a program for introducing such an educational approach using Japan's Official Development Assistance. In the past JICA has supported basic education in Egypt with the Ministry of Education and Technical Education (MOETE) through two technical cooperation projects: "Project for the Development of Creativity Lessons for Primary Education (1997–2000)" and "Project for Improvement of Science and Mathematics Education in Primary Schools (2003–2006)". However, there has not been further support since the end of the latter project in 2006. As a result JICA has dispatched a study team (hereinafter referred to as "the team") to design a new and well-informed project. JICA has also requested the team introduce the Japanese educational approach to improve students' sense of ethics, discipline and team work on a trial basis during the study, and further measure how successfully it is replicated in Egypt.

1.2 Objectives of the Study

The objectives of the study are: 1) to collect data on the basic education sector and the early childhood education sector to identify issues to be solved; 2) to implement pre-pilot activities under the Japanese educational approach; and 3) to design projects to solve the issues identified.

1.3 Comprehensive Study Schedule

The end of field study schedule was extended from December 2015 to July 2016 to implement the pre-pilot activities for one semester.

Table 1.1: Study Schedule

	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
Preparation, 1 st Study in Egypt		■										
Discussion			■									
2 nd Study in Egypt (Pre-pilot activity)				■								
Discussion, and Preparation/ Planning						■				□	■	
3 rd Study in Egypt (Sector loan study)									■	□	■	
Japan Study Visit										□		
Report preparation		□			□	□						□
■ Work in Egypt												
□ Work in Japan												

2. Major Findings of the Study

In the late 1990s Ministry of Education, Culture, Sports, Science and Technology (MEXT) in Japan introduced an education philosophy called “Zest for Living” to the national standard of curriculum Courses of Study, which aims for well-balanced development of individual students as human beings. “Zest for Living” is about developing human capability to adapt well-balanced knowledge, morals and an active body, a combination of which better enables:

- a) **Solid Academic Prowess:** The ability to acquire basic knowledge, develop critical thinking skills, improve decision-making capabilities, express themselves and encourage the aptitude to solve problems by themselves
- b) **Healthy Body:** Self-development both physically and mentally in order to live successfully
- c) **Well-rounded Character:** Self-control, cooperation with others, balanced character development and greater empathy for others

In addition, it is important to set up the environment to nurture “Zest for Living.” The two matters for the nurturing environment are as follows:

- a) **School Management:** Managing school finances and workload for new activities. Students could learn deeply under consistent rules and regulations
- b) **Involvement of Parents:** Students could learn and understand teachers’ words more easily with parents consistent with school rules and regulations

In this chapter, this study provides a comparison of educational approaches between Japan and Egypt on the items outlined in “Zest for Living”, involvement of parents and school management as follows:

- “Zest for Living” (Whole Child Development)
 - Solid Academic Prowess (See Chapter 2.1)
 - Healthy Body (See Chapter 2.2)
 - Well-rounded Character (See Chapter 2.3)
- Nurturing environment for “Zest for Living”
 - School Management (See Chapter 2.4)
 - Involvement of Parents (See Chapter 2.5)

2.1 Solid Academic Prowess

There are various factors affecting students’ academic prowess, for example not only studies in schools, but also studies at home affect achievement. As study at school is a more prioritized issue for both the Governments of Egypt and Japan, this chapter focuses on four elements related to studying at schools, namely: 1) learning materials, 2) teaching methods, 3) learning environment, and 4) evaluation and examination.

(1) Learning Materials

No	Research Item	Japanese Approach	Findings in Egypt	Remarks
1	Textbooks for math and science	Provide many opportunities for students to think for themselves.	Have some good examples to make students think for themselves, but the number of such examples is less than the Japanese type.	Egyptian teachers do not utilise good examples in textbooks to make students think for themselves yet, due to both limited time and their capacities. So, the team recommends prioritizing improvement of teachers' capacity first, before improving textbooks.
2	Learning materials for science	Provide enough materials to all schools so that all students can experience by themselves.	Even basic materials are not supplied sufficiently.	Providing all materials requires not only budget for procurement, but also constructing laboratories and training teachers on how to use them. So, the study recommends stepwise improvement on this issue by starting with providing selected simple and low-cost materials only, aiming to give opportunities for students to think for themselves.

(2) Teaching Method

No	Research Item	Japanese Approach	Findings in Egypt	Remarks
1	Students' discipline during lessons	Gives students the opportunity to consider why they should be quiet during class.	Teacher controls students well and there is no obstructing of lessons by students.	MOETE can introduce Japanese approach on this item, to make students think by themselves, but the team recommends prioritizing this item less, as students can stay in the classroom quietly.
2	Dialogue with students	Teachers use high order questions more to make students think for themselves.	Although textbook provides some high-order questions, teachers use only low order questions (Yes / No, or just memorize)	This study recommends INSET (In-Service Training) including SBI (School Based INSET on pedagogy).
3	Teachers' subject knowledge	Good enough	We guess some teachers do not have enough subject knowledge. This is why they tend to use low-order questions.	Using high-order questions without improving subject knowledge, teachers cannot answer students' questions properly. So the team recommends training for teacher on the subjects also.

No	Research Item	Japanese Approach	Findings in Egypt	Remarks
4	Approach in lessons	Student centered	Teacher centered	In consideration of current subject knowledge and pedagogy of Egyptian teachers, introducing student centered is difficult. First of all, teacher training on subject knowledge is necessary. Without enough subject knowledge, teachers cannot answer questions from students. Second, teacher training on pedagogy is also necessary. Third, continuous improvement by SBI is necessary (see below).
5	Capacity development as teaching specialist	Having lesson study among teachers regularly (SBI: School based In-Service Training) for continuous improvement of their lessons.	There is not a custom of peer teaching	This is a key item to improve teachers' pedagogy continuously. Even though teachers improve their skill by the training shown above, without continuous monitoring by others, they go back their old methods. It is necessary to increase the working hours of teachers to introduce SBI. Without introducing this item by increasing working hours, it is difficult to maintain the skills learnt.

(3) Learning Environment

No	Research Item	Japanese Approach	Findings in Egypt	Remarks
1	Classroom size	Provide enough space for students to undertake group work easily. It should be at least 1.6 m ² /student	The standard from the General Authority for Educational Buildings (GAEB) regulates it should be at least 1.1 m ² /student, but it is less in reality.	As the total number of primary schools numbers more than 10,000, replacing all primary schools with large classrooms would not be realistic. Therefore, developing new building standards and applying them on new construction should be considered.

No	Research Item	Japanese Approach	Findings in Egypt	Remarks
2	School furniture	One desk for each student. Desk is light so that a student can move easily to organize group work.	Two or three students sit at a long desk. It is difficult for them to open their notebooks. Desk is heavy to organize for group work.	Price of a set of desk and chair in Japan is around US\$280.
3	Timetable	Provide many break time for students; 1) to discuss about issues raised during lesson / class discussion, 2) to go to the toilet so that nobody goes to the toilet during lesson, 3) to move to other class if necessary, and 4) to refresh so that they can concentrate on the next lesson.	Some school provide break between lessons, but not systematically.	Recommend to provide more breaks. Current supply of toilets may not be enough, as more students can be expected to rush to the toilet during the break.
4	Punctuality	Provide clocks in all rooms. Educate importance of punctuality from P1. Teachers are expected to be a model.	No clock in any classrooms. Not only students, but also some teachers are not punctual sometimes.	
5	Class discipline	Provide opportunities in class discussion why they need to have class discipline	Teacher controls students by top-down approach. This results in no obstructing lessons by students. Discipline of students in front of teachers is quite good.	Acceptable situation
6	Teaching board	Blackboard	White board. Easy for students to see.	No problem
7	Locker for each student	Provide locker for all students. This enables not only classroom to be tidy, but also enhances students' belonging to a class.	No lockers	Providing locker for each student would enhance their sense of belonging to schools, but it costs a lot.
8	Display of students' work	Display many works such as art work, essays, picture diary etc.	Limited display. Only good works are displayed	Displaying all students' work makes students understand everybody can have opportunities.

(4) Evaluation and Examination

No	Research Item	Japanese Approach	Findings in Egypt	Remark
1	Worksheet	Give many worksheets for students' practice. Same as in Egypt, students are allowed to use a calculator from P4, but restricted in its use. Textbook provides a mark beside exercises where students are allowed to use a calculator.	Not enough worksheets. Students above P4 are allowed to use a calculator. They use a calculator on even very simple arithmetic. As a result, many students cannot read/write Arabic and calculate arithmetic quickly enough.	This study recommends providing worksheets more and more, especially for math and Arabic. Approximate cost of worksheets for one subject for P1–P6 is around EGP 64,000,000/year (8 EGP/student × 8,000,000 student).
2	Daily monitoring and check tests	Give more exercises and homework to monitor their achievements.	Do not give enough exercises to monitor students' progress.	Recommend to give more opportunity for daily evaluation. Ideally, it should be the teacher who prepares it, but in reality, it must be difficult for them to do. So, we recommend MOE provide exercise materials.
3	Evaluation examination for promotion	No examination for promotion.	More than 90% of students pass end-of semester/year examinations provided by Idara, although some students in even P6 and preparatory students could not even read/write Arabic. This indicates the end-of semester/year examinations do not work as designed.	Recommend to shift to more frequent monitoring and evaluation gradually from end-of term exam.

2.2 Healthy Body

To set up healthy body is related to the three main elements as follows:

- 1) Physical exercise: Exercise is important to set up healthy body. It is pointed out that the students lack opportunities for exercises due to the lack of school grounds and/or PE teachers, especially schools in Cairo, Egypt.
- 2) Daily habit guidance: The students' habits of food, daily sleep and hygiene could influence students' health condition. Foods for students are important for developing their healthy body, however, the schools in Cairo provide only biscuits as school lunch. In addition, school shops sell junk foods, which are high calorie and low nutrition.
- 3) Measure and record: Recording the students' bodies and their physical capacity is utilised to learn the physical development condition and facilitate early detection and treatment of disease, as well as to analyze statistical data of the students' groups.

(1) Physical Exercise

No	Research Item	Japanese Approach	Findings in Egypt	Remarks
1	Physical education (PE)	Spend around 10% of school lessons	4% of school lessons (1–2 lessons a week)	Recommend to increase lesson time.
2	PE teacher	Class teacher teaches physical education	PE teacher teaches it, but not all schools have a PE teacher. PE teacher tends not to manage students well (compared to academic teachers), they sometimes just let students play by themselves without monitoring.	Recommend to monitor PE class frequently.
3	School yard	Provide enough space for students to do physical exercise. School yard should be more than 10 m ² /student.	2.5 m ² / student in guidelines, but actually it is less than that (1.0 m ² / student)	Not recommended to improve this soon due to the expected huge cost.
4	Club activities	Teachers support students to do sports exercise after class.	No such customs	It would be difficult to introduce this without increasing teachers' working hours.

(2) Daily Habit Guidance

No	Research Item	Japanese Approach	Findings in Egypt	Remarks
1	Nutrition education	Provide well balanced School Meals and teach importance of balanced food through this.	Provide biscuit. In addition to this, school canteen provides snack, Pepsi etc. which are preservative free, but non healthy.	Providing well-balanced food is ideal, but it will cost a lot. So, recommend to replace non-healthy food in school canteen with healthy food first.
2	Importance of breakfast	MEXT ¹ does campaigns to promote early to bed, early to rise and to have breakfast. 95.6% of P6 students in Japan have breakfast (2015). ²	54% students do not have breakfast at home every day (from the baseline survey).	
3	Educate importance of sleeping	MEXT does campaigns to promote early to bed, early to rise and to have breakfast. Around 80% of primary school students go to bed before 11 pm ³ . Average sleeping hours of age	Only 41% students sleep more than 8 hours a day.	

¹ MEXT: Ministry of Education, Culture, Sports, Science and Technology - Japan

² <http://todo-ran.com/t/kiji/14692>, MEXT White Paper (2012) http://www.mext.go.jp/b_menu/hakusho/html/hpab201301/1338525_009.pdf

³ http://www.mext.go.jp/b_menu/hakusho/html/hpaa200901/detail/1283406.htm

No	Research Item	Japanese Approach	Findings in Egypt	Remarks
		10–14 is around 8–9 hours ⁴ .		
4	Hygiene education	Provide soap at water fountain and promote soap use.	Some schools do campaign to use soap for washing hands using the campaign by the United Nations Educational, Scientific and Cultural Organization (UNESCO), but this is only ad-hoc.	

(3) Measurement and Record

No	Research Item	Japanese Approach	Findings in Egypt	Remarks
1	Physical fitness test	Held once every year to measure physical capacity (50 m run, 20 m shuttle run, throwing a ball etc), record the result and report the result to the government. The government also reports the summary to other nations.	No systematic approach	
2	Body measurement	Held once every year to measure body (height, weight, waist, eyesight etc), record the result and report the result to the government. The government also reports the summary to other nations.	Some schools do, but do not record and report systematically.	Recommend to implement more systematically.

2.3 Well-Rounded Character (Cooperation, Responsibility, Leadership etc.)

It is considered that the well-rounded character of students in Japan is nurtured with sociality, discipline, and cooperativeness, related to experiences and activities involving cooperation, discipline, responsibility, and leadership. In this study, the team compares the situation in Egypt with that in Japan through the following three elements: 1) sociality and discipline; 2) cooperation and harmonization; and 3) assistance of specialists.

Comparing the situation of students' well-rounded character in Japan and that in Egypt, the roles and responsibilities of students are limited in Egypt. They do not have enough opportunities and experiences of discussion among students in groups or classmates.

⁴ http://www.suku-noppo.jp/data/sleep_time.html

(1) Sociality and Discipline

No	Research Item	Japanese Approach	Findings in Egypt	Remarks
1	Class/ Group discussion	Make students be facilitators for discussions amongst themselves.	Teachers facilitate class discussion.	The Project will try class discussions facilitated by students.
2	Daily monitor/ class coordinator	Give all students opportunity to be a class monitor in rotation.	No such custom.	-
3	School Line	Students form a line where they have assigned and fixed position.	No assigned or fixed position in the row.	-
4	Cleaning	Organized every day by groups.	Organized as an activity on an ad-hoc basis.	-

(2) Cooperation and Harmonization

No	Research Item	Japanese Approach	Findings in Egypt	Remarks
1	Team exercise (Physical Education)	Have many opportunity to do group games.	Time of PE is less.	Recommend to increase PE lessons.
2	Group work (Academic activities)	Have many opportunity to do group work.	Opportunity of group work is less. Desk and chair, class size are not appropriate for group work.	Having more group work is difficult, because it requires improvement of teachers' pedagogy first. However, since the textbook of science introduces many group work exercises, it can be possible, but needs to be studied in detail.
3	Going to school in fixed groups	Senior leads junior for; 1) safety, 2) growing responsibility of senior and 3) cooperation.	No such custom.	Must be difficult to change this custom.
4	Group duty in classroom	Each class develops students' duty work; could be voluntary work and /or assigned work.	There are school level committees, but none at classroom level.	-

(3) Assistance of Specialists

No	Research Item	Japanese Approach	Findings in Egypt	Remarks
1	Homeroom teacher system	Class teacher teaches most subjects from P1 to P6.	Class teacher teaches most subjects from P1 to P3 only, and subject teacher teaches most subjects from P4 to P6.	-
2	School social welfare worker, School counselor	Classroom teachers take care of students for the first stage.	School social welfare worker and school counselor take care of students directly for issues other than academic.	-

2.4 School Management

Comparing the situation in Japan and Egypt, there are two elements noted in school management⁵: 1) cooperation among staff; and 2) staff workload. In Egypt, schools also allot school management duties to each teacher. The staffroom, however, is not common in Egypt. Staff meetings are not frequently held.

(1) Cooperation among Staff

No	Research Item	Japanese Approach	Findings in Egypt	Remarks
1	Staff meeting	Organize every day.	Organize once a month but not fixed.	Recommend to have staff meeting at least every week.
2	Staffroom	All teachers have their desk and chair in staff room.	Not all schools have staff room. Teachers do not have fixed place to work.	Recommend to have staffroom and provide desk and chair to all teachers, including part time teachers.

(2) Staff Workload

No	Research Item	Japanese Approach	Findings in Egypt	Remarks
1	Organization and number of staff	There are various roles of groups, e.g. administration, academic, social work, health, library training etc. Teachers are assigned to various groups to organize schools.	Similar to Japan, there are various roles of groups, e.g. social work, health, library training etc. Teachers are assigned to various groups to organize schools. However in addition to teachers, there are various specialists in schools and they are key staff to organize a school. For example, social workers are responsible for the students' union. Consequently, the number of staff to organize the school is double that of Japan.	See Table 2.1 compare the situation in Egypt with that in Japan.
2	Working hours	7.5 hours besides school lunch in the regulation, however, most of teachers work more than 7.5 hours daily.	5 hours from 7:30 a.m to 1:00 p.m.	No unpaid overtime work in Egypt.

⁵ It should be mentioned that the schools in Egypt have more issues other than those two management elements, but the team thought that these issues originated from managing structure and lack of working hours.

Table 2.1: Staff of Average School in Egypt and Japan

Items	Egypt	Japan
Number of classes	13	12
Principals	1.1	1+1 (deputy)
Teachers	23.1	13.5
Specialists (e.g. social worker)	2.6	1
Workers/ admin staff	6.7	1
Total	33.5	17.5

Source: Study team

2.5 Involvement of Parents

The consistent approach between school and home could be influential on students' performance; therefore, it is important to have parents' involvement in school activities. This chapter focuses on two elements; 1) grasping educational conditions, and 2) information sharing. In Egypt, the national law regulates parents' organizations, which is similar to the Parent Teacher Association (PTA) in Japan. They do not have regular and frequent parents' meetings or class observation days in Egypt. Document communication does not exist due to the high illiteracy rate of the parents' generation.

(1) Grasping Educational Conditions

No	Research Item	Japanese Approach	Findings in Egypt	Remarks
1	Class observation by parents	Organized at least once a year to make parents aware of lessons their children taken.	No such custom.	High security clearance procedure is necessary to observe school activities in Egypt.
2	Home visitation by teachers	Organized at least once a year to know study environment at home.	No such custom.	-

(2) Information Sharing

No	Research Item	Japanese Approach	Findings in Egypt	Remarks
1	Class newspaper	Teachers publish it periodically.	No such custom.	Difficulty with high illiteracy rate of parents' generation.
2	Letters to students' parents	Issue when necessary.	No such custom.	Difficulty with high illiteracy rate of parents' generation.
3	Meeting with Parents	Not regularly, but according to the school event schedule.	Organize every month, but not fixed.	-
4	Parent-Teacher Association (PTA)	All schools have PTA. Organize meetings at prefecture level, and national level.	Parents Teachers Council (PTC) has been introduced, according to MOETE document.	-

3. Pre-pilot Activities

The objective of implementing the pre-pilot activities is to detect observable changes to be brought by introduction of some Japanese education practices. In this sense, the team did not aim to succeed in introducing some of Japanese educational activities, but to collect lessons learnt to introduce them to schools in Egypt, so that the Project could implement the activities more smoothly for the future project.

3.1 Selection of Pre-pilot Schools

The team requested to select some schools to MOETE with criteria for convenience in implementation. The criteria for selecting schools are as follows:

- 1) Built after year 2008: The team needs space to conduct observation of activities in the classroom. It is said that the schools built after 2008 have more spacious classrooms due to new school building regulations.
- 2) Full-time school: Both the school and the team find this easier to participate in and conduct activities.
- 3) Managed by competent and motivated school principal: The pre-pilot activities are conducted in the short-term, therefore the assistance of the principal and school staff is important to complete the activities.
- 4) Composed of two classes in one grade: It is easier to compare the progress of activities between the two classes.
- 5) Allotting a maximum of 40 students in one classroom: It will be difficult to observe lessons if too many students are in one classroom.
- 6) Two types of schools, one in good and the other in challenging conditions, located in the same Idara: The team can compare the results in different types of schools.

Among the criteria, MOETE informed the team about the difficulty in meeting the criteria 4), 5) and 6) all at the same time.

Therefore, MOETE proposed three schools based on the criteria 1), 2) and 3). The team visited those three schools and discussed with the principals and staff, then, selected schools with better management ability of principals and staff.

Both the team and MOETE agreed to select the following two schools as pre-pilot schools:

- El Shahead Emad Aly Kamel Primary School (Wayly Idara, Cairo Governorate)
- El Shekh Abdel Aziz School (El Warak Idara, GIZA Governorate)

El Shahead Emad Aly Kamel Primary School has the students with mostly middle-class economic backgrounds. This school participates in the UNESCO associated school project⁶.

El Shekh Abdel Aziz School is located in a rural and poor area (comment from Idara office); therefore, both the team and MOETE expected to face various difficulties to introduce Japanese educational activities. However, to gather various lessons learnt to introduce the new activities, as originally planned as criteria 6), both the team and MOETE agreed to select this school.

⁶ School global network of UNESCO: <http://www.unesco.org/new/en/education/networks/global-networks/aspnet/>

3.2 Profile of Pre-pilot Schools

The following table shows brief information on the two pre-pilot schools.

Table 3.1: Brief Information on Two Pre-pilot School

School Name	El Shahead Emad Aly Kamel Primary School	El Shekh Abdel Aziz School
Governorate	Cairo	GIZA
Idara	Wayly	El Warak
School Type	Only Primary	KG-Pri-Prep (for girls only)
Short Name in this Report	AK School	AA School

Source: El Shahead Emad Aly Kamel Primary School and El Shekh Abdel Aziz School

The following table shows the number of classes and schools of the two pre-pilot schools.

Table 3.2: No. of Students of Two Pre-pilot Schools

School Name	El Shahead Emad Aly Kamel Primary School		El Shekh Abdel Aziz School	
	No. of Classes	No. of Students	No. of Classes	No. of Students
KG 1	-	-	1	
KG 2	-	-	1	
P1	2	110	1	45
P2	2	110	1	40
P3	2	100	1	70
P4	2	93	1	40
P5	2	90	1	55
P6	2	120	1	55
Prep1	-	-	4	203
Prep2	-	-	2	129
Prep3	-	-	2	130
KG Total	0	0	2	0
Primary Total	12	623	6	305
Preparatory Total	0	0	8	462
School Total	12	623	16	767

Source: El Shahead Emad Aly Kamel Primary School and El Shekh Abdel Aziz School

3.3 Trial of Japanese School Educational Activities

The Japanese official school curriculum (Course of Study) includes “Tokkatsu” which is non-subject special educational activities through primary and secondary level education. “Tokkatsu” has been thought to be one of the major foundations for Whole Child Education in contemporary Japanese school education. “The balanced development of the social, emotional, and academic aspects of the child, and the cultivation of cooperative and interpersonal skills etc., targeted by “Tokkatsu”, are concerns shared by many countries.” The initial TOR of the pre-pilot activities was to try out some activities from this “Tokkatsu”, but the team found through the study in August 2015 that other Japanese educational activities like a worksheet and student centered approach are also necessary due to the lack of reading/writing ability of Arabic, lack of arithmetic and lack of thinking ability. As a result of the discussion between the team and JICA Tokyo Headquarters, both agreed to include not only “Tokkatsu”, but also the activities under comprehensive Japanese approach into this pre-pilot activity.

The purpose of Japanese “Tokkatsu” is to nurture the students with a balanced development of social, emotional, and academic aspects. On the other hand, the purpose of pre-pilot activities is not for

proceeding smoothly with the activities, but for learning lessons about the school conditions of Egypt.

To implement “Tokkatsu” activities in the future project, the team needs to learn what to consider or what to revise when designing the future project in Egypt.

The team compared the research items in Japan and Egypt under the elements of the Japanese approach in education in the previous section. Based on the results of the comparison, the team selected some pre-pilot activities under those research items according to the following three criteria (the process of selection is seen in Appendix 1):

- 1) The activities seem possible to complete in the short-term; to complete in 3 months from preparation to implementation
- 2) The activities are inexpensive to introduce to Egypt
- 3) The activities could bring some output even they are not continuously conducted

The following table explains the reasons for selecting activities of Japanese school education for pre-pilot activities.

Table 3.3: Selected Activities of Japanese School Education

Research Item:		
No.	Activity	Reason for Selecting the Activity
1	Punctuality: Clock in classroom and observe punctuality	There is no clock in classrooms. Students follow bells or principal's announcement. The team introduced a wall clock and large size schedule table in every classroom so that students can monitor time and follow the set time schedule by themselves.
2	Worksheet: 5- minute worksheet every day	The other Japanese school education activities are for healthy physical and emotional development. In addition, sound academic development is one of the characters of Japanese school education. Therefore, the team proposed 5 minute worksheets every day where students work on basic arithmetic questions.
3	Importance of breakfast: Early bed, early rise, breakfast at home	Many students go to school without having breakfast. They eat during lessons. According to a study in Japan, those kids who have breakfast at home tend to have better academic achievement. MEXT in Japan promotes "Early bed, early rise, breakfast at home" among primary students nationwide. Therefore, we proposed the same campaign here too in order for students to change their habits.
	Importance of Sleep: Early bed, early rise, breakfast at home	Many students stay up very late and go out with their family members. This could be the reason for students skipping breakfast. The activity attempts to improve both breakfast and sleep.
4	Hygiene education: Washing hands with soap	There are part-time school nurses and occasional health education programs in a school, but there is no soap at school toilets and facilities for hand-washing. Therefore, we proposed a simple device to hang soaps by using plastic nets and promote washing hands after using toilets and before eating.
5	Physical fitness test: Conducting physical fitness test	Test-oriented school culture, very limited area of school compound, limited availability of physical education teachers prevent schools from providing students enough PE programs. In order to grasp the level of physical fitness of students under such circumstances, the team proposed a physical fitness test conducted nationwide in Japan.
6	Daily monitor/ coordinator: Introducing daily monitor/coordinator	Only selected students take roles of class leader, not all students. Therefore, we proposed "daily monitor/coordinator" system where all students take the role in turn to monitor/coordinate class schedules for the day, lead other students to greet teachers and guests etc.
7	School Line: Fixed order/location in School Line	In many cases Egyptian people do not make queues when shopping, waiting for subway train etc. There is an activity called School Line where students stand in line, but students are taking positions randomly. The team proposed making a fixed order in school lines so that students will get used to making queues. In the long run, we expect this activity will make students do the same on various occasions in civic life.
8	Cleaning: Pick up one trash a day	Egyptian People throw litter on street, from a car window etc. As a result, streets in Egypt are very dirty. Cleaning of schools is the responsibility of janitors, but not of students/teachers. This could be one of the reasons teachers and students are not conscious about maintaining tidiness in their school. Therefore, we proposed "pick up one piece of trash a day" activity in order to raise awareness for keeping their study areas clean. In the long run, we expect this activity will make teachers and students to do the same on the public areas such as streets.
9	Group duty in classroom: Cleaning classrooms	School janitors clean classrooms and all other facilities in schools as described above. It is said that parents do not expect schools to teach anything other than academic things. However, the team proposed this activity to raise awareness for keeping their study areas clean as important as shown in the above No. 8. In the long run, we expect this activity will make students conscious about tidiness in public areas.

Source: Study team

3.4 Pre-pilot Activities Implementation

3.4.1 Schedule

The project implemented pre-pilot activities were conducted for 13 weeks from 11 October 2015 to 7 January 2016. The next table shows the detail of activities. Two or three activities were introduced in every week for the period of 5 weeks. The team offered orientation sessions a week before the implementation and principals, teachers and other staff instructed students the following week for implementing the activities.

Table 3.4: Pre-pilot Activities Schedule

Week No.	Pre-pilot Activities
1	Orientation No. 1
2	Orientation No. 2 and baseline survey for students
3	Introducing activities - Pick up one piece of trash a day - Fixed order in School Line - Daily monitor/class coordinator
4	Introducing activities - Wall clock for punctuality - Early bed, early rise, breakfast at home
5	Introducing activities - Washing hands with soap - Cleaning classroom - Physical fitness test (prep.)
6	Introducing activities - Physical fitness test (actual) Questionnaire for students (mid-term survey)
7	Introducing activities -5-minute worksheet every day (arithmetic) - Group discussion with Student Representatives (AA School) Observation of Cairo Japanese School
8	Introducing activities
9	- Group discussion with Student Representatives (AK School)
10	- Group discussion with P6 Students (AA School)
11	Continue the above activities on their own
12	
13	Questionnaire for students (endline survey)

Source: Study team

3.4.2 Orientation Implemented at Selected Pre-pilot Schools

The orientation sessions were held for MOETE officers, MOETE's local office (Idara) specialists, school principals, teachers, and other school staff. The team explained the background of this pre-pilot project, some customs in Japanese basic education at schools, objectives of the pre-pilot project, selected elements of Japanese school customs which will be introduced in the pre-pilot project, and the tentative schedule.

Validation of the activities' effects introduced to the schools was conducted through the following three ways; (i) receiving feedback from principals and teachers in the weekly introduction sessions, (ii) observation by the team, and (iii) obtaining students' information using questionnaires. The team developed a computer-scored answer sheet for the student questionnaire, which was used on three occasions; before introducing the activities (baseline), at the time all the activities have been introduced to students (mid-term), and at the end of school term (endline). There were more than 30% of absent students in AA School when the series of

student questionnaires were conducted. It should be worth noting that the possibility of having samples from different respondents may be relatively high.

3.5 Results and Lessons Learnt by Implementing Activities

In this section, we describe the results of activities introduced, with lessons learnt.

(1) Wall Clock for Punctuality

Current Practice in the Two Pre-pilot Schools

There is no wall clock and no display of timetables which are large enough for students to recognize in classrooms. Students depend on teachers' instructions, so that they do not have the custom of acting according to time on their own.

Activity Introduced and the Difference from the Current Practice

The team introduced large sized wall clocks in all classrooms. Large sized types are now used in time schedules and displayed on the front wall in all classrooms. In addition, the team requested teachers to observe the scheduled break times.

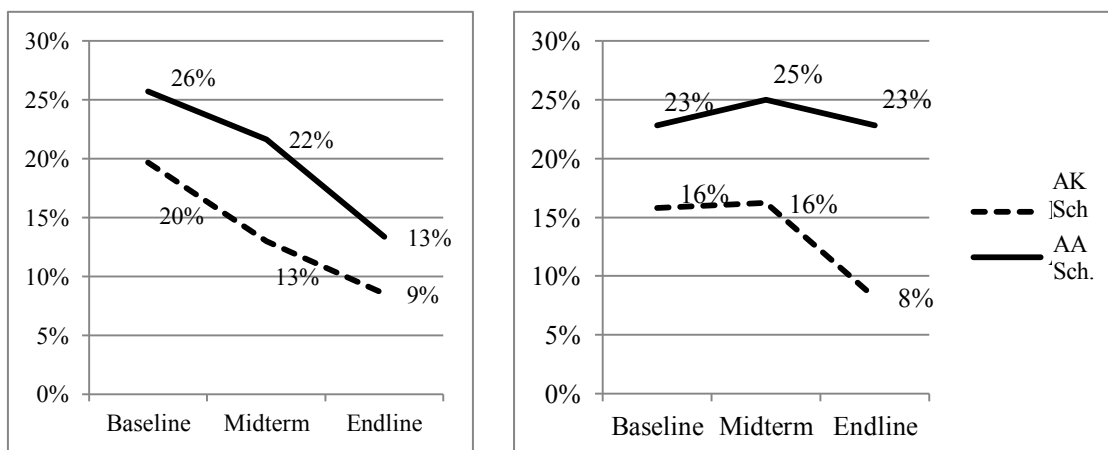


Figure 3.1: Percentage of Students' Thought (i) Teachers Cause Delays in Starting Lesson On Time (Left) or (ii) Students Do So (Right)

Feedback from the Schools and Lessons Learnt

Student questionnaires show that The number of students who think teachers cause delay in starting lessons on time as well as the ones who answered students do so both declined. This tells us that not only students but also teachers have changed their behaviour through this practice. Nevertheless, the number of students who answered that they are causing delay remained almost the same at AA School.

The above finding is backed by the results of teacher interviews, where they reported that students who can read the clock now tell them it is time for starting and ending lessons. Then teachers are now trying to begin and end the lessons on schedule. Teachers regard it as good thing, not as an embarrassment.

The wall clocks helped P1 and P2 students who started to learn how to read the clock. The clock models used in Japan, which is a part of their frequently used mathematics kits, may be useful if it is introduced together with the wall clocks in the study.

Lesson learnt 1: Need to take measures toward new issues by introducing new activities

- Teachers in AA School insisted on not letting students go out of their classrooms at every break time. They explained that it was because students will not come back to class and will start playing somewhere. In fact, there are several students wandering in the playground almost all the time. This may cause another challenge in class management.

Lesson learnt 2: Need to allocate budget for new equipment or facilities

- One wall clock costs about US\$20 in Egypt. A financial arrangement is necessary if this activity is to be replicated at other schools, for not only procuring wall clocks but also replacing batteries.

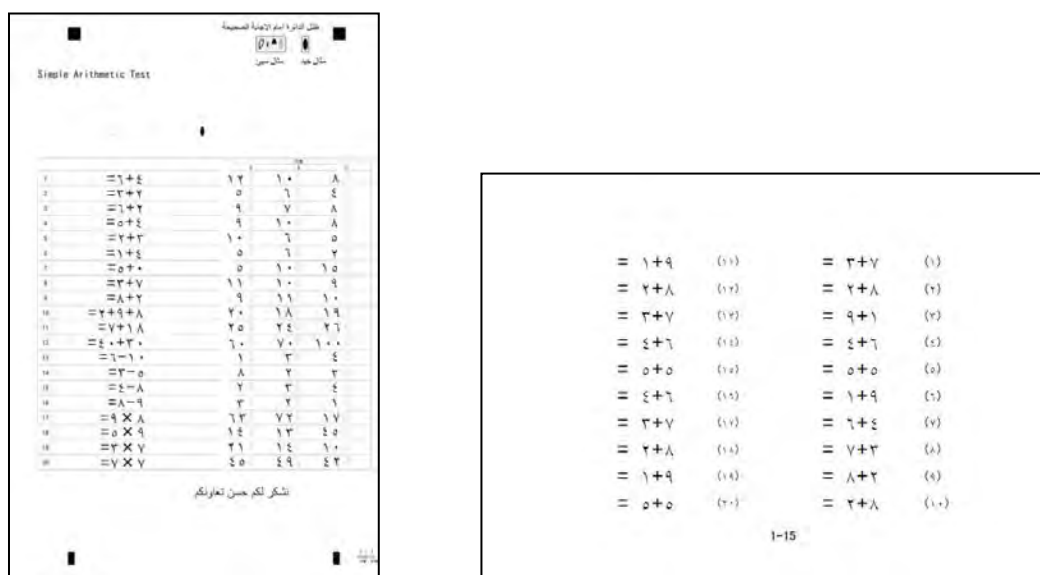
(2) Five-Minute Worksheet Every Day

Current Practice in the Two Pre-pilot Schools

Repetition practices of four arithmetic operations which are aimed at letting all students perfectly master the essential skill are not observed in schools. Worksheets for such purposes have not been recognized in major book shops. The team found many students who have not mastered essential arithmetic skills even at higher grades.

Activity Introduced and the Difference from the Current Practice

The team developed 112 pages of worksheets for basic arithmetic including simple additions, subtractions, and multiplications, and distributed them among all the students in the two schools. The students except P1, who are not yet taught about such operations, were instructed to work on the material for 5 minutes every day after the morning School Line. The team used a computer-scored multiple-choice test before and after the introduction of the activity in order to gauge its effectiveness.



**Figure 3.2: Five-Minute Worksheet
(Left: Baseline and Endline Test, Right: Worksheet)**

Feedback from the Schools and Lessons Learnt

A computer-scored multiple-choice test was used twice; before starting and at the end of the activity, with an interval of about one month. Students in both schools proceeded only within

the section of additions. An analysis of students' results in the test revealed the following four major trends, namely: 1) A slight improvement in students' computation skill has been observed (P3, P4, P5, and P6 of AK School); 2) Significant improvement in the skill (P2 of AK School, P4 of AA School); 3) No tangible change has been observed (P3 and P6 of AA School); and 4) A negative change has been observed (AK P2 and AA P4). As for 4) above, the team suspects that there may be irregularities in the tests.

Lesson learnt 3: Worksheet is an effective way to improve scores of groups with low academic ability

- Classes in AK Schools generally marked high scores in the first test, and marked a slightly better in the second test as per 1) above. Such is the most probable trend for one like AK School which is well-managed. A positive impact has been observed in students' skill for arithmetic operations, which will be described in detail later. The results seen in the group 2) above tells that this activity has the potential to have a greater impact on students' arithmetic skill. It is recommended to analyze the group 3) which does not demonstrate any improvement.
- Securing financial costs for mass producing the worksheet can be a challenge in expanding this activity to other schools.

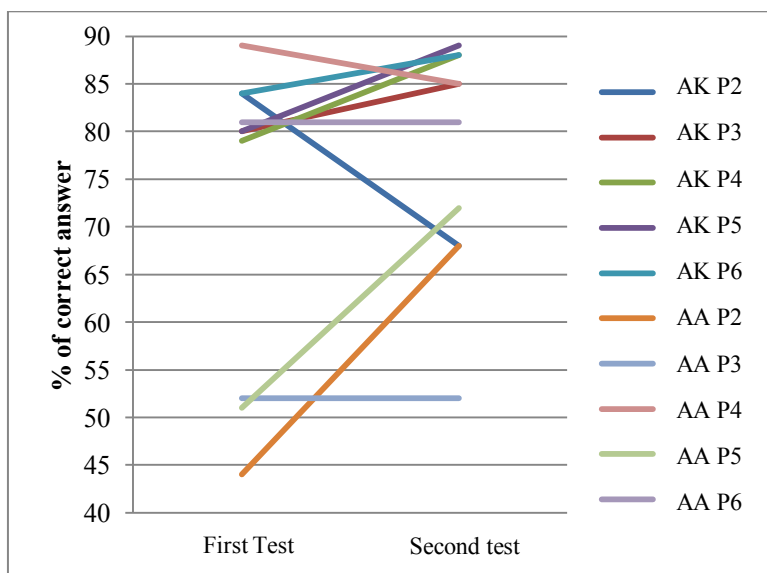


Figure 3.3: Comparison between the First Test and Second Test

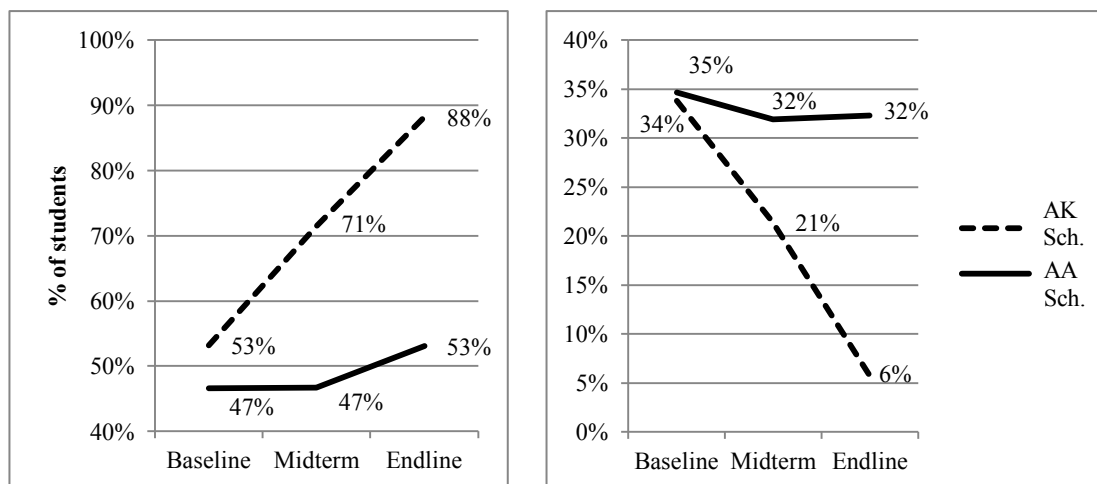


Figure 3.4: Percentages of Students (i) Repeat Saying It (Left), or (ii) Accept Others (Right) when Classmates Do Not Assent to Their Opinion

Lesson learnt 4: Worksheet is useful for individual study; a variety of people can practice by themselves

- Some parents requested the school to allow them to have spare copies so that brothers and sisters in other schools can try it

Lesson learnt 5: Need to manage materials so as not to lose them, and to allocate printing costs for worksheets

- Students in AK School now spend 5 minutes prior to the first period on the worksheet every day with their own initiative. Teachers in AK School instructed students in the same class to work on the same page so that they can help each other in marking and correcting. Each classroom in AK School has a cabinet where the worksheet books are kept when they are not in use. Parents of AK School noticed this activity and made good remarks about it.
- AA School instructed students to work on additions only, and let them to choose the page that they like. There is no storage facility available in classrooms in AA School. Students keep it in their bag and carry it every day, so that there are some students who forget to take it to school.

(3) Early Bed, Early Rise, and Breakfast

Current Practice in the Two Pre-pilot Schools

Prior to the study, the team learnt that people in Egypt stay up very late at night, not only adults but also children, and many do not have breakfast before going to school or work. The student questionnaires in the baseline survey showed that 34% of students in AA School have a sleeping time longer than 8 hours and 24% in AK School, and those who have breakfast before coming to school accounted for 58% in AA School and 37% in AK School. These results reasonably back up what the team heard earlier. Moreover, and this was further reinforced as the team observed several cases where students eat snacks during lessons.

Activity Introduced and the Difference from the Current Practice

The team requested the schools to explain the importance of sleep and breakfast to students and then instruct them to go to bed early, get up early, and eat breakfast before coming school. Since it was suggested that parents must be involved in this activity, the team first requested to the school to have sessions to explain it to parents and help their kids to follow it. Later the schools

asked for the team to talk to parents directly, so one of the team members went to the session with parents and explained the importance of sleep and breakfast in student development.



Figure 3.5: Early Bed, Early Rise, and Breakfast (Parents Meeting)

Feedback from the Schools and Lessons Learnt

In the beginning the team suggested schools use a written note such as a flyer or leaflet for parents to cooperate in the activity. However teachers mentioned that there are many parents who do not read and write Modern Standard Arabic, called “Fusha”⁷, so it may not be effective to use a written form of communications. In addition, it was suggested to try to avoid possible negative reaction from parents about this trial of Japanese activity which started in the middle of the school term. In conclusion, it may not be very effective in Egypt to use written materials such as newsletters, weekly notices, communication notebooks etc. for parents, although it is widely practiced in Japanese schools. Some other forms of communication, for instance putting up video messages or pictures with Spoken Arabic voice recordings on schools’ Facebook pages, may be considered.

The student questionnaires, which asked about the frequency of having breakfast before coming to school, revealed that the situation has improved significantly in AK School while such was not observed in AA School (see Figure 3.6).

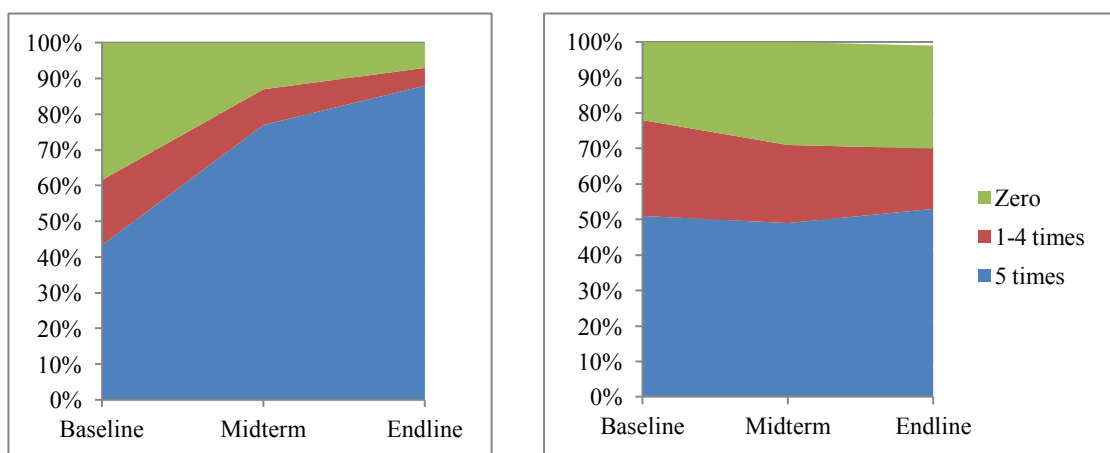


Figure 3.6: Frequency of Students Having Breakfast before Coming to School (Left: AK School, Right: AA School)

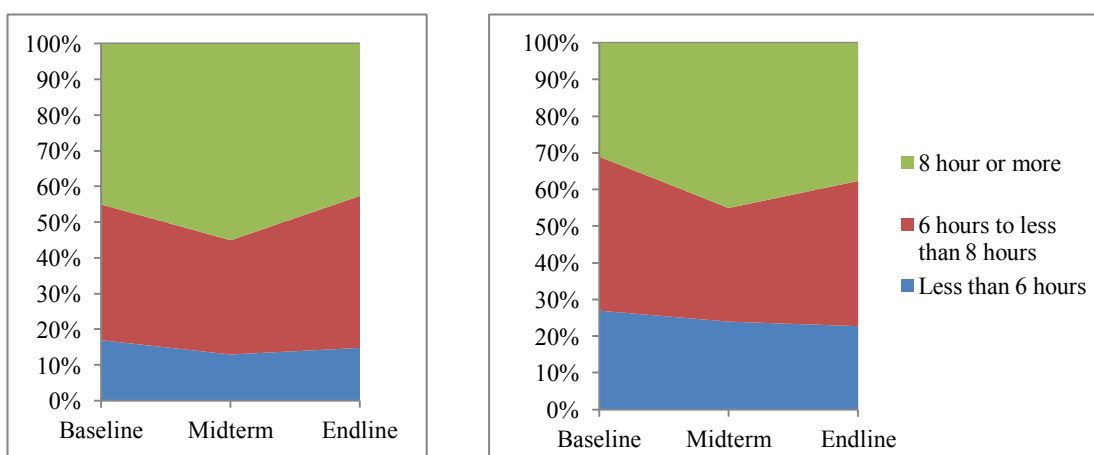
⁷ The study team learnt that there is a significant difference between spoken Arabic in Egypt “Ammeya” and the Modern Standard Arabic. The people in some rural areas do not read and write Standard Arabic very well.

Lesson learnt 6: It is difficult to change lifestyle not aligned with parents’ values

- While percentage of students having breakfast has been improved at least in one school, sleeping habits have not changed in either AK School or AA School. This study presumes that once parents understand the importance of breakfast and start providing breakfast to their kids, it may easily make a positive impact on children’s behavior. On the other hand, changing children’s behavior towards sleeping habits requires more than that of the case of breakfast. In AK School, students generally have longer hours of sleep compared to the ones in AA School. This tells us that the parents in AK School may have had some previous knowledge about importance of sleeping on children’s physical and mental development.

Lesson learnt 7: Breakfast makes students concentrate on lessons

- In AK School, teachers reported that they now observe fewer students eating snacks during the first period, and they now have more concentration in the first lesson.



**Figure 3.7: Sleeping Hours of Students
(Left: AK School, Right: AA School)**

(4) Washing Hands with Soap

Current Practice in the Two Pre-pilot Schools

There is no soap set on or around water taps at school. Occasional practices of washing hands with soap are reported when Ministry of Health or international organizations offered the schools some campaigns.

Activity Introduced and the Difference from the Current Practice

Plastic nets containing soaps, which are widely practiced in Japanese public schools, were introduced to all water taps in the two pre-pilot schools, together with information about how to wash hands properly. Teachers instructed students to wash hands with soap whenever they go to toilets.



Figure 3.8: Washing Hands with Soap (Left: Before, Middle: After, Right: Information about How to Wash Hands Properly)

Feedback from the Schools and Lessons Learnt

Figure 3.9 represents the percentage of students who answered “wash his/her hands with soap all the time”. Rising curves have been observed in both schools. AK School increased from 76% to 96%, while AA School rose from 31% to 66%.

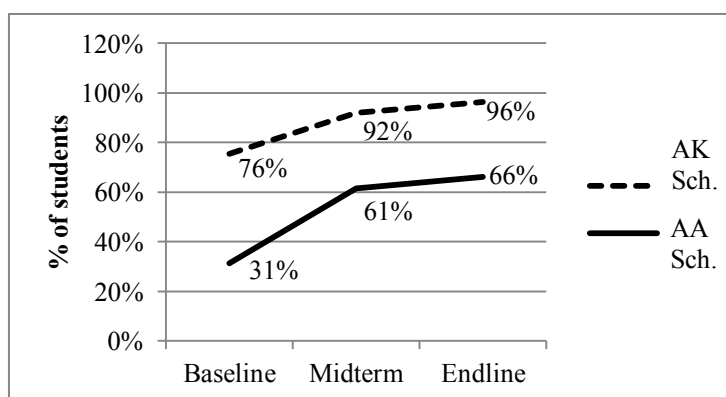


Figure 3.9: Percentages of Students (Saying Washing Their Hands with Soaps Always)

Generally speaking, schools in Egypt have only limited amounts of running water and toilet facilities compared to the increasing number of student population. If we restrict students to go to the toilet only during break times like what is practiced in Japan, there may be severe congestion expected at these places. Some teachers tried to divide their classes into several groups in order to avoid congestions at the toilet and water places, which is a good example of problem solving on its own.

Lesson learnt 8: Washing hands activity is also an opportunity for integrated studies, such as providing lessons related to water, health and public property

- It was observed that some students in AA School started playing with water and soap in the very beginning. Teachers raised a need for integrated studies such as water conservation and health issues.
- Teachers recognize the value of this activity because students' hands coming close to them are now cleaner than before.
- It was reported that there were some incidents where the soap went missing and the nets were damaged in one school. By contrast, such was not seen at the other school, where teachers said they paid close attention to it. It may be a good opportunity for the school to

have “class/group discussion (hanashi-ai-katsudo)” about respecting public property using such incidents, in the upcoming project.

Lesson learnt 9: Parents’ understanding becomes good support to the activities related to daily habits

- Parents also became supportive about this activity. In AK School, some parents now contribute to it by sending additional soap from home after the stock the team sent to school had run out.

(5) Conducting Physical Fitness Test

Current Practice in the Two Pre-pilot Schools

There is no practice to monitor students’ physical fitness ability at school. School nurses from Ministry of health who are stationed at schools measure students’ height and weight regularly. However, the data is used for school insurance and not well utilized for monitoring their development yet.

Activity Introduced and the Difference from the Current Practice

In order to grasp the level of physical fitness of students under such circumstances, the team proposed a physical fitness test which is conducted nationwide in Japan. 6 out of 8 items in the standard menu in Japan, which is shown in the table below, were tried⁸.

Feedback from the Schools and Lessons Learnt

Students generally liked the activity. Teachers stated that girls in AK School who used to be not as eager as boys about PE became very active in it. They now show some rivalry with the boys and started to get interested in PE.

Parents cooperated in the activity by making their kids go to school with PE uniforms.



Figure 3.10: Physical Fitness Test (Side Steps, Sit Ups)

Lesson learnt 10: Need to analyze background factors of schools, since they are influential to the scores of physical fitness test

- Students in AA School demonstrated relatively poor performance. The team deduces that the economic and social status of the student in AA School may not allow them to go to sports clubs where people in Egypt usually do exercises.

⁸ 50 meter run was omitted because school playgrounds were not large enough to have 50 meter straight tracks.

Table 3.5: Comparison of Fitness Test Result between Egypt, Japan, and Syria

Country	Japan	Syria	Egypt (AA)	Egypt (AK)
Grade	Grade 7	Grade 7	Grade 6 (P6)	Grade 6 (P6)
Year	2000	2000	2015	2015
Boys/girls	Boys	Boys	Boys	Boys
Age	12	12	11	12–13
# of samples	336–341	73	24	25
Height (cm)	152.8	150.4	142.8	142.5
Weight (kg)	44.0	40.8	37.3	38.7
BMI (kg/m ²)	18.8	17.9	18.3	19.1
Forward bending (cm)	37.6	27.8	23.9	32.2
Grip strength/average of both hands (kg)	25.0	24.9	8.5	11.7
Sit ups (frequency)	22.4	20.2	8.3	32.2
Side steps (frequency)	44.1	26.2	12.0	33.3
Standing broad jump (cm)	184.0	119.5	124.2	157.6
Hand ball throw (m)	N/A	N/A	13.7	10.6

Source: date for Japan and Syria are from the JICA's report about PE and international cooperation (http://jica-ri.jica.go.jp/IFIC_and_JBICI-Studies/jica-ri/publication/archives/jica/kyakuin/pdf/200103_12b.pdf), and the data for Egypt are the ones obtained in this study.

(6) Introducing Daily Monitor/ Class Coordinator

Current Practice in the Two Pre-pilot Schools

There are no practices of giving every student some responsibilities or roles to take leadership in class like “nicchoku” (“daily monitor” or “class coordinator”) in Japan. Class begins with teacher saying hello to students and there is no ending remark at the end of each lesson. Tasks like taking trash from the classroom dust bin to the large container has been carried out by the student who is instructed to do so by the teacher at that moment. There is no custom of letting students to share class' responsibilities among task teams.

Activity Introduced and the Difference from the Current Practice

A similar system like daily monitor (or class coordinator) has been introduced to both schools in order to give every student a chance to take responsibility. The team allowed some flexibility in the activity, where the majority of classes had daily rotation, and some took weekly. The tasks for the daily monitor include leading the morning greeting, starting remark or greeting in every lesson, and ending remark, distributing learning materials, turning off lights, closing windows, and cleaning white board after the lesson etc.

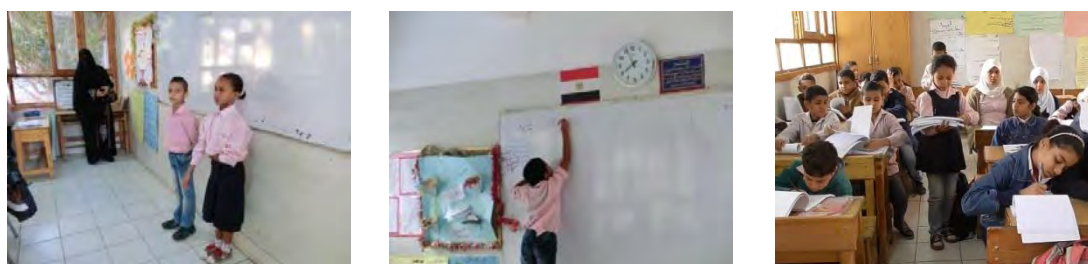


Figure 3.11: Daily Monitor's Tasks (Left: Leading Greeting, Middle: Changing Notice on White Board, Right: Distributing Worksheet Books)

Feedback from Schools and Lessons Learnt

Teachers reported that students accepted the new responsibility without resistance. They now long for their turns to come. This activity provided an opportunity for teachers and students to form a new cooperative relationship.

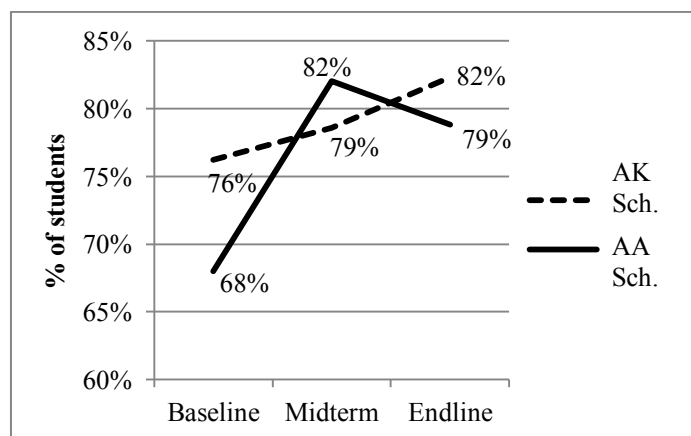


Figure 3.12: Percentages of Students (Answered that They Can Lead Their Classmates)

Lesson learnt 11: Responsibility of roles will make quiet and/or shy students more confident

- Parents of shy students are very happy as their kids are given rare opportunities of taking leadership in their class. One teacher mentioned that parents were delighted to see the list showing the order of daily monitors did include all students regardless of whether they are active or shy, loud or quiet.
- Student questionnaire survey revealed that percentages of students who answered that they can lead other classmates rose at both schools.
- The answers for the question “do you think your classmates like you?” in the questionnaire also showed a steady increase. The team infers that students’ self-esteem may now be lifted.

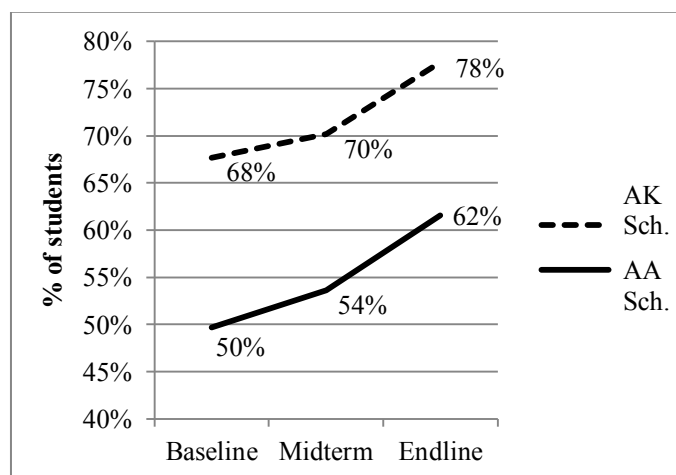


Figure 3.13: Percentages of Students (who Answered that Their Classmates Like Him/Her)

Lesson learnt 12: Need discussion activity in introducing the activity of daily monitor/class coordinator

- On the other hand, figures in the student questionnaires about the reaction when classmates do not accept the answerer’s opinion demonstrated unanticipated trends. Answers of

repeating his/her opinions increased while the ones of respecting others decreased. The team presumes that this may be a reflection of students trying to do their best in daily monitor tasks. Students were not given any instructions or practical training for building cooperative relationships with others in this pre-pilot period. Therefore, daily monitors may have forced his/her orders on to the others. Hence, it is recommended to introduce “hanashiai-katsudo” (“discussions” or “communication” activity) alongside daily monitor.

(7) Fixed order in School Line

Current Practice in the Two Pre-pilot Schools

There is an activity called School Line where all students and teachers gather at the school playground every morning. Students listen to the principal’s talk, students’ short speeches, some phrases from the Koran, poems and songs, perform simple body exercises, sing the national anthem with raising the national flag etc. At the end, they march to their classroom in one line. Their custom is to let students take any positions they like. Those who are in favor of standing at front come to school early to take that position. Teachers reported that frictions between students who wanted to take the very front were observed very frequently.



Figure 3.14: Fixed Order in School Line

Activity Introduced and the Difference from the Current Practice

The team proposed a fixed order in school lines so that students will get to know such practice. AK School opted for making students line up according to the order of their height. On the other hand, AA School had students to draw lots for allocating a number for each of them, and letting them stand in the position according to the number.

Feedback from Schools and Lessons Learnt

Because students were so used to the already established custom of a first-come first-served way, they resisted the new practice in the beginning. Teachers in AK School reported that their students now have a better view of what is happening in front of their lines during school assemblies. They also mentioned that there is less friction among students now during School Lines.

Lesson learnt 13: Habitual activities of students’ behaviors get effective outcomes by introducing them in early childhood

- Teachers commented that there should be some explanation of why they introduce such a new practice, what is the purpose of the new activity, which should be very simple for students to understand. It was suggested that this could be easily accepted if they start practicing from kindergarten level.

Lesson learnt 14: Need the processes of going through the rules of activities, which are relevant to the current situation

- One remark is that those taller students are now always at the back of lines and they may be discouraged all the time. AK School tries to change the sides of the line to start walking toward the classroom so that taller students at least get chances to be in front of their colleagues.

(8) Pick Up One Piece of Trash A Day

Current Practice in the Two Pre-pilot Schools

School janitors conduct cleaning of school facilities including classrooms. Occasionally teachers instruct some students to pick up trash on the floor on an ad-hoc basis. There is at least one trash box in each classroom at both schools. There are several large garbage containers in the corner of the playground at both schools where the trash from classrooms is stored.

Activity Introduced and the Difference from the Current Practice

Both schools allocated the last 5 minutes of mid-break for the activity where all students pick up trash and take it to garbage bins before joining school lines prior to moving back to their classrooms.

Feedback from Schools and Lessons Learnt

AK School is situated in the center of an urban Cairo area, and its premises is very narrow. When all are gathered in one place, the school playground is filled with students, leaving almost no space between them. Therefore, the activity made AK School almost trash free in a very short period of time. The result of student questionnaires revealed that the percentage of students who answered the question “which part of school needs cleaning?” by choosing “playground” rather than “classroom” and “no place needs cleaning” has been reduced to 9% at the endline survey, from 24% at baseline.

At AA School, this pre-pilot project targeted primary schools only. Therefore, only teachers of primary level at both pre-pilot schools were involved in the series of instruction sessions. On the other hand, AA School is a combined one with preparatory school⁹ for girls, leaving their teachers unaware about what was going on. As a result, preparatory students in AA School did not actively take part in the activity which also reflected the behavior of the primary students. As Figure 3.16 indicates, the percentage of students in AA School who think playground needs cleaning was more or less unchanged from baseline to endline survey. The team later tried to have the preparatory level students engaged, however, the team was unable to observe a tangible improvement due to the limited period of time left in the school term.

Lesson learnt 15: Involvement of attached schools expands the effect of cleaning activity; while it is difficult to maintain activities in a small size school due to fast improvement

- It is reported that the activity could not be securely implemented in AA School because the higher graders in preparatory school were not involved, and those students in primary level, who are apparently the target students, did not get serious about the activity as they observed their seniors were not exercising the collection of trash. By contrast, such was not observed in AK School. So the lesson learnt is that if there is another level of school attached, involving the higher level school is crucial.
- A very narrow school compound like AK School will be cleaned within a very short period of time. This activity may be worth doing as a sort of awareness campaign, not as an actual practical training for students. As a reference, AK School shifted the target of this activity to “throw trash in trash bins” from “pick up one piece of trash a day”.

⁹ Preparatory school in Egypt is equivalent to junior high school of Japan, which is lower secondary level.



Figure 3.15: Pick Up One Piece of Trash A Day

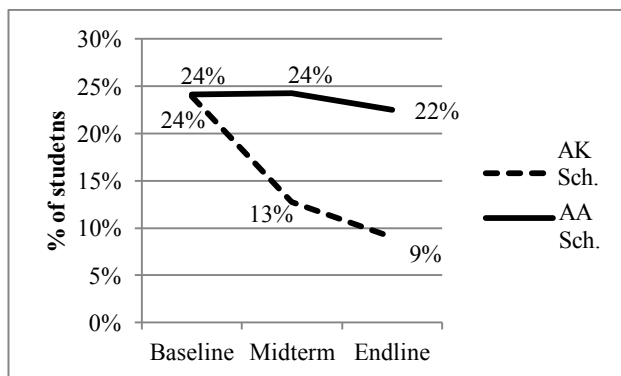


Figure 3.16: Percentages of Students (Thinking it is Necessary to Clean Playground)

(9) Cleaning Classrooms

Current Practice in the Two Pre-pilot Schools

School janitors clean classrooms and all other facilities in schools. It is said that parents may say that they do not expect their children to learn something other than academic things, especially cleaning.

Activity Introduced and the Difference from the Current Practice

A class was divided into several groups (of 4 to 5 students), and one group cleans their classroom at the end of the day. In AK School the group of students, with their class teacher, move desks and chairs and clean the floor with brooms. If the floor is very dirty, they use a mop to wipe the floor. The school procured cleaning tools on its own, while the team provided dust pans and hand brooms. They allocated one corner in every classroom to store (or display) these like the one in Cairo Japanese School.



Figure 3.17: Cleaning of Classrooms (Left & Middle: Lower Grade Students Cleaning Their Classroom, Right: Cleaning Tools)

Feedback from the Schools and Lessons Learnt

At AK School, percentage of students who answered with “classroom” rather than “playground” or “no place needs cleaning” to the question “which place needs cleaning?” increased to 90% in the endline from 75% in the baseline survey. The team deduce that this increase occurred because their playground became very clean in a very short time and the students’ focus was shifted to their classrooms. In addition, it was reported that students showed enthusiasm towards the activity.

In AA School, percentages of students who answered it is necessary to clean the classroom stayed the same at the baseline and endline surveys. This is understandable as the cleanness of their playground did not change throughout the period.

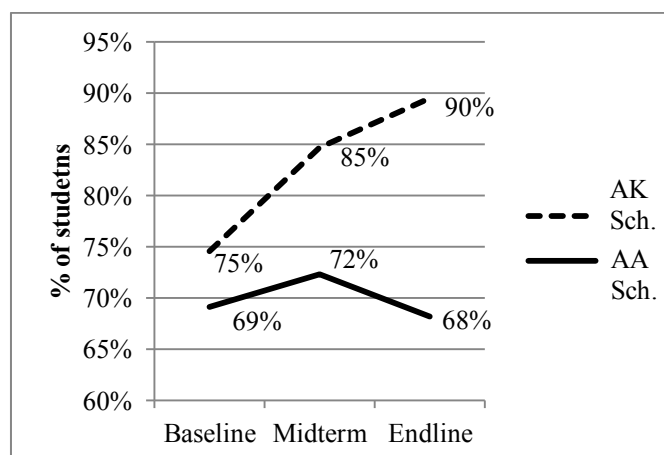


Figure 3.18: Percentages of Students (Thinking it is Necessary to Clean Classroom)

Lesson learnt 16: Roles and duties in the classroom increase students’ motivation to come to school

- Principal of AK School stated that it was their students’ idea to add mops to the cleaning tools for cleaning. Another teacher reported that number of absent students decreased in AK School after introducing this activity.

Lesson learnt 17: When introducing new activities, teachers’ workload increases for learning the new approach, explaining purposes and those effects to parents, and assisting students with activities

- Negative reactions from parents were observed in both schools in the beginning. In AK School teachers continuously tried to talk to the parents. The principal also took part in the cleaning and showed his determination. Then gradually parents started to accept this trial. Later, parents started to notice the changes in their children as they began helping their mothers cleaning at home. Some parents cooperated by sending masks and grabs to school with their kids¹⁰.
- The greater part of cleaning work of the lower graders has to be taken by the class teacher. However, the teachers for such grades mentioned that there is a significant value in letting students learn such life skills as well as a sense of social responsibility. AK School now has many visitors for observation which include the Governor.

(10) Introducing Class/ Group Discussion

Current Practice in the Two Pre-pilot Schools

The team has not recognized any activities in public schools in Egypt that are similar to “class discussion” in Japan where students take initiative in discussing classroom issues and finding solutions. There is a student representative system, however students were generally passive in it, just listening to what teachers say.

¹⁰ The study team also provided dust pans and hand brooms as we observed some students used their hands to gather trash and take it to the trash bin.

Activity Introduced and the Difference from the Current Practice

This activity was not planned in the beginning, however, since it was observed that “pick up one piece of trash a day” and “cleaning classroom” activities were making slow progress at AA School, the team decided to try it at the end. The team requested that both schools set the session with student representatives, and P6 students in AA School.

Feedback from the Schools and Lessons Learnt

A teacher facilitated the session with student representatives in one school. The team found that the teacher talked a lot and the students were passive in the session. Then the team later took the role of facilitator in the session with P6 students there.

It is confirmed that the student representatives from both schools and P6 students from AA School managed to come up with some reasonable proposals for the question “what do you think is necessary for your school to be trash-free?” Some examples are: “allocate a place in the class room to put cleaning stuff”; “when someone throws trash on the ground, we try to instruct him/her not to do this and explain the importance of cleaning”; “display pictures about cleaning”; and “make slogans for it”.

Lesson learnt 18: Need to conduct introductory training in facilitation, including purpose and method for teachers

It is a key point to note that public school teachers do not have experience in facilitating such discussion sessions, in which students were actively exchanging their ideas, and proposing their own solutions for classroom issues, followed by student-initiated actions.



Figure 3.19: Student Representatives in AK School



Figure 3.20: P6 Students in AA School

Lesson learnt 19: Utilize discussion often in the process of Japanese activities

- Besides this activity, the necessity of discussion was mentioned in other activities, such as (4) Washing Hands with Soap, and (6) Daily Monitor/Class Coordinator. It is considered important to listen to students' comments for consensus building or deciding ideas in Japanese education; discussion is often used.

Box: Observation at Japanese School

MOETE officials, Idara officers, principals and teachers from the two pre-pilot schools visited Cairo Japanese School and observed some customs of Japanese school education practiced in the school.

Brief outline of Cairo Japanese School

- School mission
- Daily Schedule (especially reading books in the morning, morning meeting, clean up time)
- Class Activities (class motto/slogan, student council motto/slogan, clean up time, book reading)
- School Events (students' presentation, Egyptian culture event, Japan Day, sports festival, school marathon, field trip/school trip, tree-planting)

Displays

- School mission
- Class mottos / slogans
- Class newsletters
- Class rules
- Yearly schedules
- Magnet card of daily monitors / class coordinators
- Rotation table for cleaning
- Magnet cards of subject names which class coordinator changes every day
- Check sheet of black board cleaning



Figure 3.21: Cleaning Tools

Teaching & learning materials

- End of unit tests
- Worksheet books
- Classroom libraries

Display of students' achievements

- Recommended books
- Individual objectives for the term
- Monthly report of class
- Other achievements such as essays, calligraphy, art works etc.
- Teachers comments on every work of students for encouragement



Figure 3.22: Many Displays of Students Works

4. Conclusion

Some of the results of implementing the Japanese educational approach at AK School and AA School seemed to contribute to develop solid academic prowess, healthy body, and/or well-rounded character. However, the process of introducing activities and outputs are different between the schools with good and more challenging backgrounds. Below is a table summarizing results, comparing AA and AK Schools. The team set up four categories; A: Improvement in both good and more challenging schools, B: Improvement only in good school, C: No improvement in both schools, and D: Improvement in more challenging school.

Table 4.1: Outputs Comparison in Japanese Educational Activities

No	Activity	Comparative Point of View	AK School	AA School	Remarks	Category
1	Wall clock for punctuality	Output	Improved	Improved		A
2	5-minute worksheet everyday		Improved	Greatly improved		D
3	Early bed, Early rise, and Breakfast	Output of breakfast	Improved	No change		B
		Output of sleep	No change	No change		C
4	Washing hands with soap	Output	Improved	Improved		A
5	Conducting physical fitness test	-	-	-	The point of view is only easy to conduct or not; so no comparison	-
6	Fixed order in School Line	Output	Improved	Improved, need time		B
7	Introducing daily monitor/class coordinator	Leadership	Improved	Improved	Students insisted on their opinions strongly to complete their roles in AK School, which seems a negative impact of the activity.	A
8	Pick up one piece of trash a day	Output	Improved	Not yet improved	One of the factors for a lack of improvement is that the attached school of AA School did not participate in the activity.	B
9	Cleaning classroom	Output	Improved	Improved slightly	The parents in both schools generally did not agree with the activity. Some supporting parents were seen in AK School.	B

Source: Study team

The common results are that it was easier introducing activities in AK School. The factors contributing to this are several, but the most influential factor is that AK School has strong management. AK School has tried to improve the school for a long time, before the team came

for this study; therefore, strong leadership of the principal and high motivation of the staff to improve their work assisted the pre-pilot activities of the team. The team could introduce the activities and implementation smoothly in AK School. On the other hand, the principal of AA School changed just before introducing the pre-pilot activities. The AA School staff did not have enough time to build the trust with the new principal before starting the activities.

The category A means that AA School also showed some good results even in the challenging conditions, and that the outputs depended on the new tools for introducing activities Wall clock of activity No. 1), Soap net of activity No. 4), and the students' improving self-esteem (Daily monitor/ class coordinator of No. 6).

The category B means that a good school produced good results. However, the differences were small between the two schools in No. 7 Fixed order in School Line, and No. 9 Cleaning classroom. The big difference was seen in No. 8 Pick up one piece of trash a day, which depended on the external factor of having or not having an attached school. Another big difference was seen in No. 3 Early bed, early rise, and breakfast, which was due to the parental factor.

The category C means that the both schools did not change the condition. The parents are influential in improving breakfast consumption, but not to sleep hours. The team felt difficulty in encouraging families.

The category D means that AK School showed some good output, which means that No. 2 5-minute worksheet every day increased the scores of students in the more challenging school better than that of the good school.

It is difficult in deciding the best activity, since the evaluations of activities were different among the stakeholders. For example, Idara office recognized cleaning classrooms as good activities (they visited the pre-pilot schools to observe the activity), while the students' parents were not in favor of the activity.

Summary of Lessons Learnt

The lessons learnt by the pre-pilot activities are categorized into four fields; 1) the output of the activity itself, 2) the factor enhancing the output of the activity, 3) the workload for introducing the activity, and 4) the budget for new activities. The lessons learnt by Japanese educational activities are listed below.

(1) The Output of the Activity Itself

The activities such as worksheet, taking breakfast, group duty in classrooms are effective even in short-term implementations.

- **Lesson learnt 3:** Worksheet is an effective way to improve scores of groups with low academic ability.
- **Lesson learnt 4:** Worksheet is useful for individual study; a variety of people can practice by themselves.
- **Lesson learnt 7:** Breakfast makes students concentrate on lessons.
- **Lesson learnt 11:** Responsibility of roles will make quiet and/or shy students more confident.
- **Lesson learnt 16:** Roles and duties in the classroom increase students' motivation to come to school.

(2) The Factor Enhancing the Output of the Activity

In order to enhance the output, it is necessary to consider comprehensive stakeholders, and maintain the activities. The habitual activities or disciplines are more effective to introduce in early childhood. Japanese educational activities require discussion as often as is necessary.

- **Lesson learnt 6:** It is difficult to change lifestyle not aligned with parents' values.
- **Lesson learnt 8:** Washing hands activity is also an opportunity for integrated studies, such as providing lessons related to water, health and public property.
- **Lesson learnt 9:** Parents' understanding becomes good support to the activities related to daily habits.
- **Lesson learnt 12:** Need discussion activity in introducing the activity of daily monitor/class coordinator
- **Lesson Learnt 13:** Habitual activities of students' behaviors get effective outcomes by introducing them in early childhood.
- **Lesson learnt 15:** Involvement of attached schools expands the effect of cleaning activity; while it is difficult to maintain activities in a small size school due to fast improvement.
- **Lesson learnt 18:** Need to conduct introductory training in facilitation, including purpose and method for teachers
- **Lesson learnt 19:** Utilize discussion often in the process of Japanese activities

(3) The Workload for Introducing the Activity

Due to the cultural differences between Egypt and Japan, introducing new activities brings new issues. It is necessary for Egyptian schools to try the process of going through the relevance of new rules or activities, if those are effective even in the current situation in schools in Egypt.

- **Lesson learnt 1:** Need to take measures toward new issues by introducing new activities
- **Lesson learnt 10:** Need to analyze background factors of schools, since they are influential to the scores of physical fitness test.
- **Lesson learnt 14:** Need the processes of going through the rules of activities, which are relevant to the current situation
- **Lesson learnt 17:** When introducing new activities, teachers' workload increases for learning the new approach, explaining purposes and those effects to parents, and assisting the students with activities.

(4) The Budget for New Activities

The schools need a budget for introducing new activities.

- **Lesson learnt 2:** Need to allocate budget for new equipment or facilities
- **Lesson learnt 5:** Need to manage materials so as not to lose them, and to allocate printing costs for worksheets.

This study confirmed through the pre-pilot project that the Japanese educational approach resulted in a positive change in Egyptian public school education. However, some points to keep in mind are summarized below. The points should be carefully referred to when the full-scale project is planned and implemented.

- **Education level:** If there is more than one education level in one school compound, such as primary and preparatory schools, all levels should be involved. Some activities which are to shape students' behavioral habit, like the one "fixed location in school line" in the pre-pilot project, should be started at an earlier stage of education, preferably in Kindergarten.
- **Target Schools:** Sound school management is a key factor for smooth implementation of the project, which usually goes hand in hand with a good relationship with stakeholders such as parents, and results in expected outcomes faster. On the other hand, schools which lack good school management may have challenges in obtaining the expected effect. Therefore, the team suggests selecting some schools with good management first, as model schools to show the effects, then expanding the models to more challenging schools.
- **Teachers:** Working hours of public school teachers are relatively short (0730–1300). However, the volume of the curriculum is quite large and their work load is very heavy since many students who come to public schools lack an educational environment at home. Additional working hours are necessary in order for the new educational activities are to be introduced.
- **Parents:** There were parents who did not agree on letting students do cleaning at school in the beginning. However the study found that once they understood its intention and possible outcomes those parents would eventually support it. There are many parents who do not read and write Modern Standard Arabic, so it may not be very effective in Egypt to utilise written materials for communicating with parents in the project. Parents' support is, however, necessary for effective project implementation. The project needs to set up some meetings with parents in Egyptian style to convince them.
- **Students:** The study found that shy and reserved students as well as slow learners would be motivated too, if an appropriate level of roles, activities, and materials are offered in school. However they have not been trained to acquire the mindset of self-direction, discussing with other colleagues, finding their own solutions for their problems. Careful and meticulous instructions may be necessary in case of introducing the activities like class discussions and class task teams.
- **Equipment:** Introducing equipment (e.g. plastic net for soap) which is not common in schools in Egypt helps to introduce activities more easily. If the procurement costs are not too high, the team suggests utilizing some equipment for the project's convenience.
- **Improving academic ability:** Worksheet for daily practice is effective for basic academic improvements, especially in the schools with a more challenging environment. The team suggests that the worksheet activity should be included in the activity list for the challenging schools.

5. Recommendation

After implementing pre-pilot activities explained in the previous chapter, a draft outline of the new technical cooperation project was agreed between MOETE and JICA in January 2016. This chapter describes the image of schools equipped with new educational approach in Egypt, provides an outline of the new Japanese educational approach, an outline of the proposed technical cooperation project, and the future image of the education with the Egypt-Japan School (EJS). Besides this, it also refers to the implementation schedule, school furniture and equipment for the new educational approach and human resource development plan.

5.1 Image of Schools Equipped with New Educational Approach

Educational Philosophy

School is a small society where children not only study academic subjects, but develop their social and emotional skills, which is a key skill for being a responsible member of society. The Egypt-Japan School (EJS) tries to foster a 21st century citizen who has a sense for caring about other people, and an ability to find his/her role in society, by which he/she contributes for collective benefit. They are expected to actively and positively think for themselves and take initiative in playing the role.

Educational Concept

(1) Create an atmosphere where all educational activities are developed/conducted through exchanging ideas among not only students but also all those who are involved in school matters, such as teachers and parents

- Develop students' problem solving skills which are applicable to the ones in real-life situations, based on the firm foundation of essential basic academic skills such as reading, writing, and arithmetic
- Teachers facilitate students' positive and voluntary initiatives, and lead them to reach a solution that they collectively agree upon through an exchange of ideas which could positively contribute to solving the problems
- Teachers continuously develop their teaching skills by holding training workshops at school where they observe each other's lessons and exchange friendly but critical advice
- In order to acquire the above educational philosophy, the EJS schools and parents facilitate cooperation with each other through frequent communication for exchanging ideas

(2) Develop students' ability in problem solving based on the solid foundation of basic academic skills, a healthy and physically fit body, and social and emotional skills

- Teachers, parents, and students work together in ensuring that no student will be left behind in obtaining essential basic academic skills such as reading, writing, and arithmetic
- Students will be provided educational activities for a healthy body, and develop and maintain strong physical fitness using large athletic fields and sports facilities
- Students' social and emotional skills will be developed through "Tokkatsu" which is commonly practiced in Japanese schools
- Students' problem solving skills will be developed through hands-on Tokkatsu activities where student groups are set to solve real-life problems on their own

Detailed Specification of the EJS

- Activities that will develop and maintain basic academic skills
 - 5-minute worksheet every morning (Arabic and mathematics)
 - Homework and reading at home
- Activities that encourage students to be responsible members of society at school
 - Taking on several roles in turn by implementing special activities (Class/Group Discussion, Daily Monitor/Class Coordinator, Cleaning classrooms, Group duty in classroom)
 - Taking on roles in student organizations (Student union, School committee)
 - School Events (Physical fitness test, Medical checkup)
 - Club activities

*The EJS will particularly focus on Class/Group Discussion among the above activities.
- School management that will strengthen teachers' motivation
 - A regular teachers' meeting
 - Class-based teacher assignments system for grade 1 to 3, subject-based teacher assignments system for grade 4 to 6.
 - Allotment of school management duties (Head of Tokkatsu, Head of Curriculum, Head of the grade, Head of maintenance, and Local community coordinator)
 - Overtime payment
 - Annual school plan
- Parents' involvement in school activities
 - Supporting students' homework
 - Reading at home
 - Parent-Teacher Notebook

Recommended Timetable of the EJS

The gray shaded cells indicate the Tokkatsu-related educational activities.

Period	Sunday	Monday	Tuesday	Wednesday	Thursday
	School line	School line	School line	School line	School line
	Worksheet	Book reading	Worksheet	Book reading	Worksheet
	Meeting	Meeting	Meeting	Meeting	Meeting
1	Arts & crafts/music	Arabic	English	Physical Education	Mathematics
2	Arts & crafts/music	Arabic	English	Physical Education	Mathematics
3	Religion	Mathematics	Arabic	English	Tokkatsu
4	Arabic	Mathematics	Arabic	English	Tokkatsu
	Lunch	Lunch	Lunch	Lunch	Lunch
	Break	Break	Break	Break	Break
	Cleaning	Cleaning	Cleaning	Cleaning	Cleaning
5	Arabic	Arabic	Mathematics	Arabic	Arabic
6	English	Arabic	Activity	Arabic	Arabic
7	English	Religion	Activity	Mathematics	Religion
	Meeting	Meeting	Meeting	Meeting	Meeting

5.2 Outline of the New Japanese Educational Approach

By applying some Japanese educational activities, Egyptian schools are expected to develop students' responsibility in society. 'Special Activities (hereinafter referred to as 'Tokkatsu') are one of the Japanese style educational activities that are considered as a program for developing students': 1) Solid Academic Prowess, 2) Well-rounded Character, and 3) Healthy Body through the activities such as Group/Class discussion. The following sections consider the detailed implementation plan of Egyptian style Tokkatsu in EJS. The Egyptian style Tokkatsu that can be applied under the Egyptian educational environment will be called 'Tokkatsu+' in the following sections.

First, the following part considers the application/dissemination plan of Tokkatsu+ in EJS, by preparing the necessary environment such as the implementation system, school facilities, school equipment, additional teaching materials, teachers' education and the evaluation system.

Program Structure

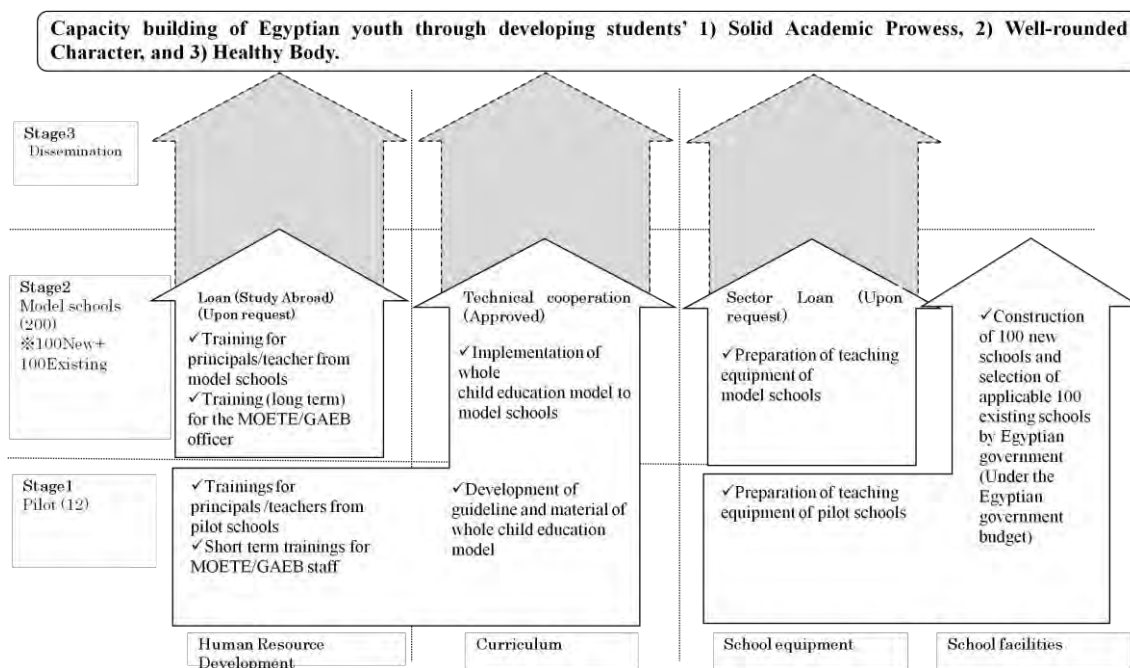
The following three strategies are necessary for the Tokkatsu+ program to be implemented.

- ✓ Curriculum: Improving school management systems, teacher's workload and teaching methodology that are applicable for implementing Tokkatsu+ program. Developing the detailed model plan for Tokkatsu+ in EJS and using it for disseminating the model to other schools in Egypt
- ✓ School equipment/facilities: Preparing necessary teaching equipment for Tokkatsu+ in EJS and constructing new EJS schools
- ✓ Human Resource Development: Providing training for those who will take a responsibility to develop and disseminate the Tokkatsu+ model in Egyptian schools

In order to disseminate the EJS model effectively to the whole of Egypt, the program will increase the numbers of target schools under the three stages as follows:

- **Stage 1**: Pilot schools (12)
- **Stage 2**: Pilot schools (12) + Model schools (200)
- **Stage 3**: Pilot schools (12) + Model schools (200) + other schools in Egypt

The next chart summarizes the program structure and the three stages to disseminate the Tokkatsu+ program in basic education in Egypt.



Source: The team created the chart with reference to the chart provided by JICA Headquarters.

Figure 5.1: Application/Dissemination Plan of Tokkatsu+ Program in Basic Education in Egypt

The following part explains the detailed plans for each Stage shown in Figure 5.1.

At Stage 1, the Tokkatsu+ program will be implemented for 12 pilot schools under the technical cooperation project that has been already agreed upon between MOETE and JICA. At this stage, the EJS guideline and materials as well as the basic principles and program contents of the EJS will be developed (Curriculum). Although the basic EJS principles would not be well developed at this stage, as this is the first preparatory stage, the necessary teaching equipment for the EJS will be provided by the Egyptian government with their own budget (School equipment). Additionally, training for principals and teachers from pilot schools will also be provided to enhance principals' and teachers' capability to develop this Tokkatsu+ program at each pilot school. These training sessions also include a lesson study after school as well as a cluster training among teachers from different schools. Furthermore, short term training sessions will be also provided for MOETE and GAEB officers so that they can manage and coordinate this program with less difficulties (Human Resource Development). The expected outcome at this stage will be: creating the role model of the EJS, establishing the guideline of the EJS, and the necessary materials for the EJS (Curriculum); preparing a standard list for the necessary school furniture and equipment (School equipment and facilities); and creating a guideline for lesson study at the EJS (Human Resource Development).

At Stage 2, by using the outcomes that have been developed through Stage 1, the EJS program will be disseminated to 200 schools in Egypt. It is assumed that the project at Stage 2 will face several obstacles that were not come across during Stage 1. However, overcoming these new challenges at Stage 2 will enable the project to develop an effective EJS dissemination role model. At Stage 2, the project will operate the EJS program at 200 model schools that include 100 new schools which will be constructed by the Egyptian government following the Japanese design, and 100 existing schools that will be selected by Egyptian government. The Egyptian government will also renovate some schools among these selected 100 existing schools if necessary.

At Stage 3, the project will attempt to disseminate the EJS model for other schools throughout Egypt. The design of 100 new schools constructed during Stage 2 will be a role model for

additional new schools at Stage 3. In addition, the renovation methodology used during Stage 2 will also help the additional renovations for some existing schools at Stage 3.

When the Egyptian government requests the Yen Loan program for preparing school furniture and equipment for 200 model schools, the Yen Loan program can be considered to be launched. The following sections will provide the necessary information for considering this Yen Loan program for preparing school furniture and equipment at the EJS.

5.3 Expected Transformation through New Educational Approach

This study expects schools to be in a place where students are willing to go and actively take part not only in academic studies but also in cultural, social, sports, and other parts of school life through introducing the New Educational Approach. In order to realize such a school, it is expected that all stakeholders, principals, teachers, parents, students, and so on, will be transformed into the ones shown in the following table.

Item	Current	Future
Student	Students repeat what teachers instruct in order to have perfect memorization. Students are not accustomed to answering questions other than yes/no type ones. Many students go to private lessons after school	Students will be able to find solutions through group discussion, and through generating hypotheses, which can contribute to developing their high-order thinking skills
Teacher	Teachers frequently have their students memorize facts or tell something back to them exactly the way it was told	Teachers will be able to offer students opportunities for developing high-order thinking skills through organizing in-school capacity development programs
Evaluation	Students are evaluated by mid-term and final exams in which the results are shown in % (from 0 to 100). There is a system to keep students in the same grade if he/she fails the exams	Teachers will be able to offer more frequent and meticulous evaluation by which they can follow up students who are behind in their study
School management	Principals conduct frequent monitoring among teachers. There is more or less one staff meeting per month.	Teachers will be able to behave in a disciplined manner so that there will be less monitoring by principals. More frequent staff meetings will be conducted for sharing information about important issues and objectives
Parent	Parents' major interest is in academic study	Parents will be able to understand the importance of well-balanced development of children including healthy mind and body
Classroom	Students do not pay attention to the trash left on the floor	Students will be able to take care of a clean study environment

Desk and chair	2 or 3 students sit together in one pair of chair and desk combination (chair attached to desk), which is very heavy and not easy to change the seating formation for group study	Each student has his/her own pair of detached chair and desk, which is light enough for one child to change seating formation for group study
Staff room	Most public schools do not have large scale staff room for all teachers for preparing their lessons	There will be a staff room large enough to accommodate all teachers for proper preparation of their lessons, where staff meetings will be conducted more frequently
School lunch	Light snacks such as biscuits are provided to students by the government. It is not used for an educational purpose, neither as students' rotating task nor for nutritional education	Nutritionally balanced school lunch will be provided to students, where the event is used for educational activities such as students' rotating task and for nutritional education

5.4 Outline of the Proposed Technical Cooperation Project

As shown in the earlier chapters, the study found that there is less attention on students' physical and emotional development in Egyptian public school education. Although the major focus is on the academic side, there are many students left behind without mastering essential basic literacy and numeracy skills. Therefore, the study team proposed the "Whole Child Education" approach for the new educational approach in Egypt, which is commonly practiced in Japanese public schools under the government's policy of "Zest of Living" that aims for well-balanced development of individuals academically, physically, and emotionally as human beings.

The official request of the Project was submitted by the Ministry on August 2015 under the name "The Project for Creating Environment for Quality Learning". JICA sent a Project Formulation Mission in January 2016 and discussed an outline of the Project with MOETE. This chapter explains the detail of the Technical Cooperation Project.

According to the agreed project document, the project period is four years starting from August 2016 until July 2020. The overall goal of the Project is "Public schools in Egypt adopt the Whole Child Education model in their practice", while its project purpose is "The Whole Child Education model is in operation at selected target schools". There are three expected project outputs, namely: (1) Guiding documents/materials for introducing the Whole Child Education model are developed; (2) Officials/Principals/Teachers become capable of putting the Whole Child Education model in practice; and (3) Mechanism to disseminate the Whole Child Education model from the pilot to the target schools is established. The expected activities for the above (1) are: 1-1. Define detailed project activities and respective indicators; 1-2. Develop standards and assessment tools for the Whole Child Education in Egypt; 1-3. Develop training materials; 1-4. Develop supplemental teaching & learning materials; and 1-5. Develop a model school design (facility, furniture & equipment). The expected counterpart agency is Central Administration for Kindergarten and Basic Education for the above 1-1, 1-2, and 1-3, and a specialist team in MOETE for 1-4, and GAEB for 1-5 respectively. As for the above (2), this study proposes to provide local training for principals and teachers of pilot schools and MOETE local office staff, as well as training in Japan for the teachers and the ministry officials who exhibit a strong willingness towards the New Education Approach or demonstrate outstanding

performance in the project. The Project Management Unit (PMU), which will be described below, is expected to take the role for selecting the candidates for such training. The PMU is also expected to be responsible for developing a mechanism to disseminate the model of the New Education Approach to the other schools.

Executive Committee One (EC1) later named this Whole Child Education model as “Tokkatsu+”. The “+ (plus)” represents some other features of Japanese school education, such as school management, that are not usually regarded as parts of Whole Child Education. The Committee expressed an interest in taking such important features of school system to Egypt as well.

5.5 Implementation Schedule

The following table shows the tentative schedule for disseminating the New Education Approach. The number of pilot schools will be increased to 12 in the 2016/17 academic year from 2 in 2015/16. Out of the targeted 200 model schools, approximately 10 new schools will be built in 2016/17, followed by 40 schools in 2017/18 and 50 schools in 2018/19. It is expected that the Approach will be introduced to 50 already-existing schools each in 2017/18 and 2018/19 respectively. According to the draft list submitted in Executive Committee One (EC1) on 23 June 2016, there are 12 locations identified which GAEB has started the design stage, while 19 candidate locations in 16 governorates are under the site survey stage.

- 12 locations under design stage: Alexandria, Port Said, Domiaatt, Dakahleya, Monofeya, Giza, Menia, Aswan, Red Sea, Matrouh, Beheira, Ismailia
- 19 locations under site survey: Cairo, Suez, Sharkeya (3), Kalioubeia (2), Kafr Al Sheikh, Monofeya, Qena, Bani Swif, Assiutt, Sohag, North Sinai, South Sinai, Fayoum, New Valley, Luxor, Gharbeia

Table 5.1: Dissemination Schedule

Classification	2015/16	2016/17	2017/18	2018/19	2019/20	Total
Pre-pilot and pilot school	2	10			0	12
Model school						
New schools		10	40	50	0	100
Existing schools			50	50	0	100

Source: A preliminary draft by the Working Group formed under Central Administration for Kindergarten and Basic Education (CAKBE)

5.6 School Furniture and Equipment for New Education Approach

This Study also proposes that the model schools be equipped with additional furniture and equipment for accommodating the New Education Approach based on Tokkatsu, which is called (1) “Minimum Package”. In addition, some additional school equipment can be offered according to each school’s need, which is called (2) “Optional Package”.

(1) Minimum Package

The New Education Approach based on Tokkatsu will have “Discussion” activities in its center of many other educational activities. This includes not only the discussions among students but also the ones among teachers. It is expected that these discussion activities will develop their capacity for team work, creativity, and problem solving, which can contribute in forming a well-rounded character. In order to undertake such discussions in classrooms, school furniture shall be specially designed for accommodating frequent arrangement changes.

Table 5.2: Minimum Package

Place	User	Item	Amount
Class room	Teacher	Work desk	1 / a class x 27 classes / a school
	Teacher	Lecture table	1 / a class x 27 classes / a school
	Student	Desk with hook	40 / a class x 27classes / a school
	Student	Chair	40 / a class x 27classes / a school
	Student	Locker	15 cells / a unit x 3 units / a class x 27 classes / a school
	-	White board (for back of class)	1 / a class x 27 classes / a school
	-	Display board	1 / a class x 27 classes / a school
Staff room	-	Wall clock	1 / a class x 27 classes / a school
	Teacher	Work desk	52 / a school
	-	Monthly planning board	1 / a school
Out-side	-	Wall clock	1 / a school
	-	Outdoor clock	10 / a school

Source: Study team

(2) Optional Package

MOETE's preliminary Working Group showed an interest in additional school equipment that was observed by the members who took part in Japan Study Visit in May 2016. This study proposes the following list of equipment that consists of either the items used in pre-pilot activities or the ones seen in the Visit.

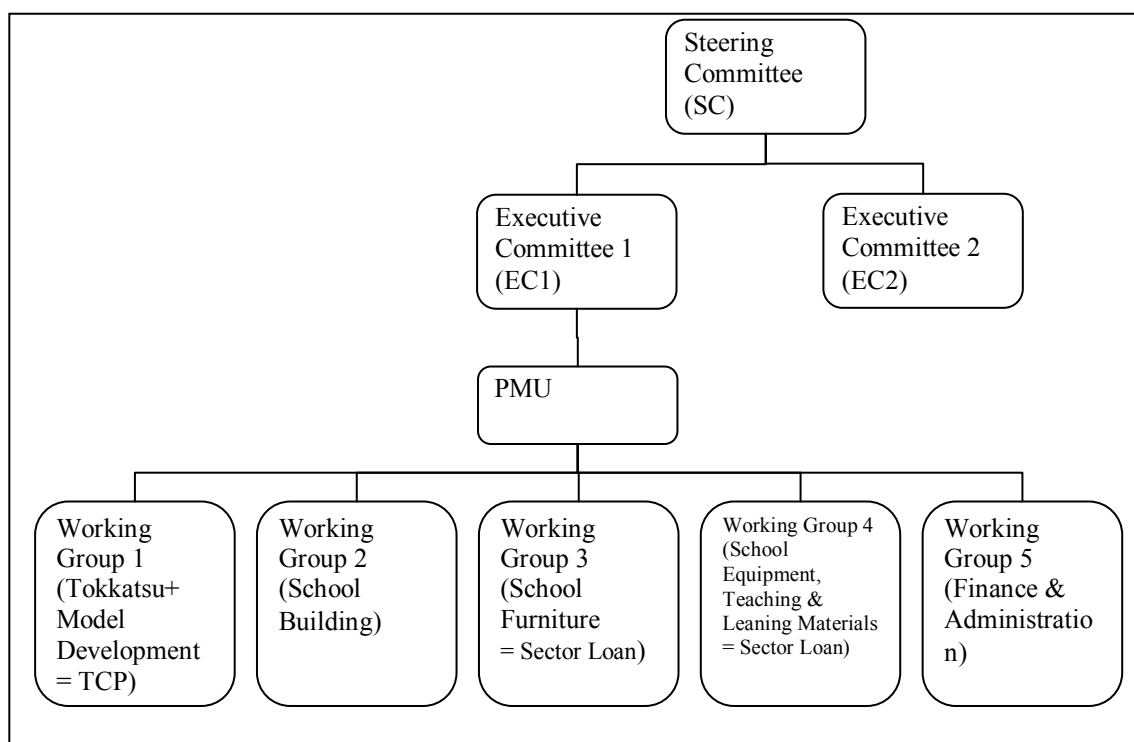
Table 5.3: Optional Package

Activity	Item	Amount
Physical fitness test	Stop watch	4 / a school
	Hand grip meter	4 / a school
	Measuring scale for forward bending	4 / a school
	Measuring mattress for standing broad jump	4 / a school
	Measure (50m)	4 / a school
Body measurement	Stadiometer	4 / a school
	Weighing Scales (bathroom scale)	4 / a school
Physical strength	Physical fitness equipment for playground	1 package / a school
Music	Soprano recorder	40 sets / a school
	Key harmonica (melodica)	40 sets / a school
School line	Portable podium for school line	1 set / a school
Work sheet	Digital rotary offset press machine (RISOGRAPH)	1 set / a school
Special activities	Tokkatsu-related teaching & learning materials	1 package / a school
Science experiment	Advanced science laboratory equipment	1 package / a school

Source: Study team

5.7 Implementation Mechanism

The President of Egypt and the Prime Minister of Japan once again met in Tokyo on February 2016 and agreed on a comprehensive cooperation framework called "Egypt Japan Education Partnership (EJEP), which covers from pre-school education to higher education. Egypt Japan Education Partnership (EJEP) has been supervised by the Steering Committee (SC) which is under the chairpersonship of the National Security Advisor to the President of Egypt. There are two sub-committees set under the SC, namely Executive Committee One (EC1) and Executive Committee Two (EC2). EC1 is responsible for the educational stages administered by the Ministry of Education and Technical Education (MOETE), which includes the issues related to this project to introduce the New Education Approach based on Tokkatsu. The project will be implemented by a Project Management Unit (PMU) under MOETE, which is not yet formed at the time of this report. It is expected that the PMU will be responsible for strategy making, project planning, drafting necessary Ministerial decrees, securing budget in MOETE and implementing it, managing and administering the project, and necessary coordination with other parties concerned. In addition, it is said that there will be five Working Groups under the PMU for taking care of technical issues.



Source: Preliminary draft by the Working Group formed under Central Administration for Kindergarten and Basic Education (CAKBE)

Figure 5.2: Implementing Structure

The following table indicates expected major participants in the above five Working Groups under PMU.

Table 5.4: Working Groups

Name of Working Group	Major Participants
Working Group 1 (Tokkatsu+ Model Development = TCP)	Central Administration for Kindergarten and Basic Education (CAKBE)
Working Group 2 (School Building)	GAEB
Working Group 3 (School Furniture = Sector Loan)	GAEB
Working Group 4 (School Equipment, Teaching & Learning Materials =Sector Loan)	CAKBE, GAEB
Working Group 5 (Finance & Administration)	MOETE, PMU, CAKBE, GAEB

Source: Study team

5.8 Human Resource Development

This study recommends that the project should provide opportunities for capacity development for the New Education Approach to principals and excellent teachers, MOETE and GAEB officers, MOETE local office members, university professors and researchers who are interested in introducing the Approach in teacher education. The following table shows the estimated number of such personnel according to the categories of capacity development.

Table 5.5: Human Resource Development Plan (tentative)

	Type of Training					Financial Scheme		Total
	Short term (A)	Short term (A)	Short term (B)	Master	PhD	TCP	HD Loan	
	TCP	HD Loan	HD Loan	HD Loan	HD Loan			
Principals & teachers from 12 pilot schools	14	0	0	0	0	14	0	14
Principals and teachers from 200 model schools	36	118	80	2	3	36	203	239
MOETE staff	0	15	10	10	10	0	45	45
GAEB staff	0	10	0	0	0	0	10	10
Local office staff	0	50	12	0	0	0	62	62
Total	50	193	102	12	13	50	320	370

Source: Study team

*Short term (A): Two weeks

* Short term (B): Three months

*TCP: JICA Technical Cooperation Project

*HD Loan: JICA Human Development Loan

*The numbers in the categories for Master and PhD study reflect the ones requested from MOETE to the Ministry of Higher Education, which will administer the Human Resource Development Loan Program.

Appendices

Appendix 1: Selecting the Pre-pilot Activities

The Criteria for Selecting The Pre-pilot Activities

- (1) The activities seem possible to complete in short-term to complete in 3 months from preparation to implementation
- (2) The activities are inexpensive to introduce to Egypt
- (3) The activities could bring some output even they are not continuously conducted

Capability	Matter	Element	Research Item	(1)	(2)	(3)	No. in the list	Activity Introduced		
Zest for Living	Solid Academic Prowess	Learning Materials	1	Textbook for math and science						
			2	Learning materials for science						
		Teaching Method	1	Students' discipline during lessons						
			2	Dialogue with students						
			3	Teachers' subject Knowledge						
			4	Approach in lessons						
			5	Capacity development as teaching specialists						
		Learning Environment	1	Classroom size						
			2	School furniture						
			3	Time table						
			4	Punctuality	✓	✓	✓	1	Wall clock for punctuality	
			5	Class discipline		✓				
			6	Teaching board			✓			
			7	Locker for each student			✓			
			8	Display of students' work	✓	✓				
		Evaluation and Examination	1	Worksheet	✓	✓	✓	2	5-minute worksheet every d	
	2		Daily monitoring and check tests		✓					
	3		Evaluation examination for promotion							
	Healthy Body	Physical Exercise	1	Physical education						
			2	PE Teacher						
			3	School yard						
			4	Club activities						
		Daily Habit Guidance	1	Nutrition education			✓			
			2	Importance of breakfast	✓ home	✓ home	✓	3	Early bed, Early rise, and Bread	
			3	Educate importance of sleep	✓ home	✓ home	✓	3		
			4	Hygiene education	✓	✓	✓	4	Washing hands with soap	
		Measurement and Record	1	Physical fitness test	✓	✓	✓	5	Conducting physical fitness t	
			2	Body measurement		✓				
		Well-rounded Character	Sociality and Discipline	1	Class/ Group discussion	✓	✓		10	Introducing Class/Group discus (added later)
				2	Daily monitor/ class coordinator	✓	✓	✓	6	Introducing daily monitor/ class co
	3			School Line	✓	✓	✓	7	Fixed order in School Line	
	4			Cleaning	✓	✓	✓	8	Pick up one trash a day	
Cooperation and Harmonization	1		Team exercise		✓					
	2		Group Work (Academic activities)		✓					
	3		Going to school in fixed Groups	✓	✓					
	4		Group duty in classroom	✓	✓	✓	9	Cleaning classrooms		
Assistance of Specialists	1		Homeroom teacher system							
	2		School Social Welfare Worker, School Counselor							
Nurturing Environment for "Zest for Living"	School Management	Cooperation among Staff	1	Staff meeting		✓				
			2	Staff room						
		Staff Workload	3	Organization and number of staff						
			4	Working Hours						
	Involvement of Parents	Grasping Educational Condition	1	Class observation by parents						
			2	Home visitation by teachers						
		Information Sharing	1	Class newspaper		✓				
			2	Letters to student's parents		✓				
3	Meeting with parents									
4	PTA Parent-Teacher Association									

✓ home : need assistance at home

Appendix 2: Student Questionnaire

Questionnaire

What is your grade? Write figure

How many hours a day after school do you spend your time for the followings on average?

2	Watch TV, use PC, games, smartphone	Less than 1 hour	More than 1 hours less than	3 hours or more
4	Study	Less than 1 hour	More than 1 hours less than	3 hours or more
1	help my family work	Less than 30 minutes	More than 30 minutes less	1 hours or more
3	Exercise (play sport , play outside with friend)	Less than 30 minutes	More than 30 minutes less	1 hours or more

Chose the best answer to fit you

1	How Many hours do you sleep a day?	Less than 6 hours	6 hours to less than 8 hours	8 hour or more
2	How many subject do you study with tutors?	3 or more subject	1 or 2 subjects	Zero
3	How many breakfast do you you have at home in weekdays?	5 times	1-4 times	Zero
4	Do you use a soap when you wash your hands?	Always	Only at home	No
5	Does your classmates love you?	Everybody loves me	Some loves me	Nobody loves me
6	How many favorite classmate do you have in your class?	More than 5	1 to 4	Nobody
7	Who teach you in your home the most?	Mother	Other family	Tutor
8	Whom do you like the best?	Class teacher	Head teacher	PE Teacher
9	Which do you like in your school life?	Academic lesson	Physical educatoin	Break time
10	Which do you think cleaning is necessary?	Classroom	School yard	Not necessary
11	Can you lead your classmate?	Yes	Sometimes	No
12	Who is not punctual to start lesson on time?	Teacher	Myself	My friend
13	Who contribute improving your school / class the best?	Myself	My friends	Teacher
14	What will you do When your classmate do not accept your opinion?	Repeat it.	accept their idea	Leave the group

Appendix 3: Draft Project Design Matrix (PDM)

25th Jan 2016

Project Title: The Project for Creating Environment for Quality Learning

Cooperation Period: August 2016— July 2020

Target Group: Basic education schools

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
<p>Overall Goal Public schools in Egypt adopt the Whole Child Education model in their practice</p>			—
<p>Project Purpose The Whole Child Education model is in operation at selected target schools</p>	<p>Number of schools students who observe positive changes in their schools increase. Number of teachers who observe positive changes in their schools increase</p>	<p>Questionnaire Questionnaire</p>	<p>Social and economic conditions are unchanged Policies of basic school education are unchanged</p>
<p>Outputs Guiding documents/materials for introducing the Whole Child Education model are developed</p>	<p>Standards, training materials, and essential teaching & learning materials for introducing the Whole Child Education model in Egypt are prepared. Standards, guidelines, and model designs of facilities and equipment are ready to use in new school construction</p>	<p>Standards, training materials, teaching & learning material Standards, architectural design of the Whole Child Education model school</p>	
<p>Officials/Principals/Teachers become capable of putting the Whole Child Education model into practice</p>	<p>Concerned MOETE officers, Idara officers, school principals become familiar with the Whole Child Education. XX% teachers in pilot schools and sample target schools become familiar with how to conduct lessons and activities based on the Whole Child Education</p>	<p>Questionnaire Questionnaire</p>	
<p>Mechanism to disseminate the Whole Child Education model from the pilot to the target schools is established</p>	<p>More than XX schools participate in the training programs. The responsibility about the Whole Child Education is specified in TOR of concerned MOETE officers.</p>	<p>Project report TOR</p>	

<p>Activities</p> <p>1-1. Define detailed project activities and respective indicators</p> <p>1-2. Develop standards and assessment tools for the Whole Child Education in Egypt</p> <p>1-3. Develop training materials</p> <p>1-4. Develop supplemental teaching & learning materials</p> <p>1-5. Develop a model school design (facility, furniture, & equipment)</p> <p>2-1. Training in Japan</p> <p>2-2. Orientation in Egypt</p> <p>2-3. Baseline survey</p> <p>2-4. Training in pilot schools weekly</p> <p>2-5. Conducting lessons and activities of the Whole Child Education in pilot schools</p> <p>2-6. Endline survey</p> <p>3-1. Develop incentive mechanism for target schools to adopt the Whole Child Education model</p> <p>3-2. Workshops for principals of neighbouring target schools at pilot schools</p> <p>3-3. Workshops for teachers of neighbouring target schools at pilot schools</p> <p>3-4. Baseline survey at selected target schools</p> <p>3-5. Implementing the Whole Child Education in target schools</p> <p>3-6. Endline survey at selected target schools</p> <p>3-7. Conduct scientific study to measure effectiveness of the Whole Child Education</p> <p>3-8. Seminar (local and international)</p>	<p>Input</p> <p>Japanese-side</p> <ul style="list-style-type: none"> - Experts <ul style="list-style-type: none"> ➤ Chief Advisor / Education Management ➤ Whole Child Education / Monitoring and Evaluation ➤ School Facility and Equipment ➤ Training Planning Management and Coordination ➤ Early Childhood Education - Resource Persons <ul style="list-style-type: none"> ➤ Local staff ➤ Interpreter - Local administrative coordinator - Trainings in Japan - Teaching and learning materials for the pilot schools - Other essential operations for implementing the project <p>Egyptian-side</p> <ul style="list-style-type: none"> - Counterpart Personnel <ul style="list-style-type: none"> ➤ Project Director ➤ Project Manager ➤ Project Coordinator for Special Activities ➤ Project Coordinator for Model School Campus ➤ Project Coordinators for supplemental teaching & learning materials ➤ Coordinators in pilot/target Idara Offices ➤ Other administrative staff ➤ Driver - Facilities <ul style="list-style-type: none"> ➤ Office space and necessary facilities for JICA experts ➤ Store rooms for goods for pilot schools. ➤ Official vehicles - Extended working hours of teachers - Furniture and equipment for the target schools - Teaching & learning materials for the target schools - Trainings - Others 	<p>Adequate and qualified counterparts are assigned.</p> <p>Sufficient budgets are ensured and disbursed in a timely manner.</p> <p>Pre-conditions</p> <p>Social and economic conditions are unchanged.</p> <p>Policies of basic school education are unchanged.</p>
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Note:

