



Final Report of Project

Project No. : 2008 /0305

Part A

Project Title: **A T³ Project: A pedagogical change of teaching, learning & assessment**

Name of Organization/School: **St. Andrew's Catholic Primary School**

Project Period: From **September 2009** (month/year) to **July 2010** (month/year)

Part B

Please read the Guidelines to Completion of Final Report of Quality Education Fund Projects before completing this part of the report.

Please use separate A4-size sheets to provide an overall report with regard to the following aspects:

1. Attainment of objectives
2. Project impact on learning effectiveness, professional development and school development
3. Cost-effectiveness – a self-evaluation against clear indicators and measures
4. Deliverables and modes of dissemination; responses to dissemination
5. Activity list
6. Difficulties encountered and solutions adopted

** Final Report of Project prior to the 8th call should be signed by the supervisor of the school/the head of the organization or the one who signed the Quality Education Fund Agreement for allocation of grant on behalf of the organization.*

** Final Report of Project under the 8th and subsequent calls should be submitted via "Electronic Project Management System" (EPMS). Once submitted, these reports are regarded as already endorsed by the supervisor of the school/the head of the organization or the one who signed the Quality Education Fund Agreement for allocation of grant on behalf of the organization.*

1. Attainment of Objectives

Objective statement	Activities related to the objective	Extent of attainment of the objective	Evidence or indicators of having achieved the objective	Reasons for not being able to achieve the objective, if applicable
Tailor a school-based curriculum & M ^{book} that apply the framework of Universal Design for Learning (UDL) & whole-class approach Gifted Education to address learning diversity.	Deliveries the following materials: <ul style="list-style-type: none"> a school-based P1 curriculum that applied the framework of Universal Design for Learning; M^{book} that aligns with the school-based curriculum with at least 2 levels of difficulties 	Fully attained	We have successfully transformed our curriculum into a multimedia courseware with the use of nowadays advanced technology. The courseware allows pupils to learn through watching videos, listening to sounds clips and educational interaction. Pupils can also learn their own pace, i.e.: remedial pupils are able to re-attempt lessons for learning reinforcement and better achievement.	Not applicable
Develop the e-Portfolio System to strengthen the effectiveness of our Assessment for Learning.	Development of the e-Portfolio System that strengthens the effectiveness of our Assessment for Learning	Fully attained	The e-Portfolio system is capable of showing individual pupil's specific performance, which allows teachers and parents to monitor them easily.	Not applicable
Enrich teachers' knowledge and experience in curriculum design and implementation both online and offline	Teacher trainings that are hosted by external professional parties, which focus on developing teachers' practical skills in curriculum design, design of IT-enhanced pupils-centered learning activities, and implementation	Fully attained	Our P1 teachers involves in every sessions of discussion and development of the courseware. Feedbacks on enhancement have been frequently given by teachers throughout the development of the courseware and the system. All P1 teachers now acquire the skills of developing the courseware as well as monitoring their pupils through the e-Portfolio system.	Not applicable

2. Project Impact on

Pupils

With the courseware in the programme, our pupils are able to learn through watching videos, listening to sounds clips and educational interaction. Since we apply the UDL framework to develop diverse learning channels, the school can address the pupils' learning diversity. As a result, pupils can learn at their own pace, i.e.: remedial pupils are able to re-attempt lessons for learning reinforcement and better achievement.

According to the research of Dr. ⁴, we indicate that most of our pupils engaged to the interactive lessons and over one-third of the pupils achieved outstanding results. Furthermore, the majority of them believed that they have improved their English in various aspects (see Appendix II).

Teachers

Our teachers have successfully transformed the previous traditional curriculum into a multimedia courseware with the use of nowadays advanced technology. All P1 teachers now acquire the skills of developing the courseware as well as monitoring their pupils through the e-Portfolio system.

Regarding the e-Portfolio system, teachers can trace and identify pupils' abilities and learning process in different language skills. Hence, we are able to place them in different learning tasks according to their abilities, which provide our teachers with efficient monitoring. They are also able to provide timely encouragement and intervention to pupils' learning with those data collected from the courseware.

Parents

With the e-Portfolio system, parents become capable to monitor their children's specific performance easily. The majority of the P1 parents fully understand the concepts behind the project and are able to provide necessary support to their children at home. According to the reflection, they love the M^{book} and the courseware that the project contains, as they can see observable improvement among their children's language skills and learning motivation.

School

Learner's diversity is generally occurred in Hong Kong. T³ project is very committed to address the diversity by tailoring a curriculum and courseware with portfolio system that can extend pupils' learning from the school to home and from the school-hour to the weekend and long vocation.

This project also promotes transformation of teaching, learning and assessment, thinking and wise use of technology. We are confident that its concept finally will goes beyond the traditional perception of learning: rely on single source of learning materials / textbook. In the future, we hope teachers and pupils will see learning is a series of activities anywhere and anytime with no limitation of learning format. This is the way forward for our education goal: Develop pupils' potential and self- and independent life-long learners to face every challenge that may occur in their life.

3. Cost-effectiveness

Among a total budget of \$472,400, our major cost items are the services including development and consultation of the school-based curriculum, the e-Pilot system, M^{book} production, the required software, and etc. For equipments and other general purposes, both parents and school share the expenses together.

We have nearly 3,000 direct beneficiaries this year, including pupils, teachers, parents, and other education fellows. Therefore, the unit cost for the direct beneficiaries would be around $\$472,400/3,000=\157.50 . After the first year, we believe that this project is highly sustainable, as the curriculum and courseware developed under this project will be extensively used in the following years for our P.1 to P.6 pupils with no further development cost. We believe the beneficiaries will be much more than we expected.

4. Deliverables and Modes of Dissemination

Item description (e.g. type, title, quantity, etc.)	Evaluation of the quality and dissemination value of the item	Dissemination activities conducted (e.g. mode, date, etc.) and responses	Is it worthwhile and feasible for the item to be widely disseminated by the QEF? If yes, please suggest the mode(s) of dissemination.
School-based M ^{book} Curriculum with courseware, lesson plans, and other materials <ul style="list-style-type: none"> • 12 modules lesson plan • Extended learning / home-assignment • Graphic Design for offline lesson materials 	100% completed and enhanced		We may host seminars to introduce the project and share our experiences to the public, as our principal, teachers, and pupils are ready and eager to share our success with others.
The e-Pilot system – Learning Management System, Courseware, and Assessment System Online <ul style="list-style-type: none"> • Database design • Interface design • Individual pupils profile structure • Awarding system • Detention and acceleration function • Re-try homework system, recording highest score and No. of re-try 	100% completed	See <u>Activity List</u> for further details	
Research Findings of Interactive Learning	100% completed	Not applicable	

One of the success factors for the project is that our school maintains strong administration to mobilize all possible resources. We also have supportive teachers conduct, facilitate and monitor the progress of the programme effectively. Meanwhile, our service provider () provides on-going update and improves the programme according to teachers' requirements. Moreover, our pupils' parents show understanding and support on monitoring and encouraging the pupils.

The curriculum and courseware developed under this project will be extensively used in the following years for our P.1 to P.6 pupils with no further development cost. Our project team will facilitate workshops to share their experience and results of the project to teachers of other subjects. Therefore, the outcomes harvested in the first year will be able to carry on for the future and we expect to extend the outcomes to cover different subjects to create a sustainable culture for learning and teaching. The service provider also will assist us in hosting seminars for new pupils and parents and provide hotline support.

This form/guidelines can be downloaded from the QEF webpage at <http://qef.org.hk>.

5. Activity List

Types of activities (e.g. seminar, performance, etc.)	Brief description (e.g. date, theme, venue, etc.)	No. of participants				Feedback from participants
		schools	teachers	pupils	others (Please specify)	
Teacher Trainings	<u>1st Training</u> Date: 2009-08-21 Time: 1:30pm-4:00pm Venue: Room 602		18			Teachers are capable of mastering the development and the application of the courseware and the e-Portfolio System.
	<u>2nd Training</u> Date: 2009-10-21 Time: 4:00pm-6:00pm Venue: Computer Room		5			
Pupil Orientations	<u>1st Orientation</u> Date: 2009-09-04~2009-09-11 Time: English lesson Venue: P1 Classrooms			P1 Pupils		The P1 pupils showed difficulties in learning through computers at the beginning; however, through sessions of training, they're all able to master the courseware independently.
	<u>2nd Orientation</u> Date: 2009-12-15 Time: 1:45pm-2:15pm Venue: Classrooms			Whole school		
Parents Seminar	<u>Session 1</u> Date: 2009-07-11 Time: 10:00am-11:30pm Venue: School Hall				66 Parents	The majority of the S1 parents fully understand the projects and are able to provide necessary support to their children at home.
	<u>Session 2</u> Date: 2009-11-25 Time: 2:00pm-3:00pm Venue: Computer Room				23 Parents	



「e 世代法律暨校本 電子課程的教與學」 分享會 (Organized by Central Committee for Diocesan Schools)	Date: 2010-10-14 Time: 2:00 pm-5:00pm Venue: Jordan Valley St. Joseph's Catholic Primary School		200 (Teachers, Principals from kindergarten, primary and secondary schools)		Participants were impressed by the comprehensiveness and effectiveness of the e-Curriculum implemented in St. Andrew's. They also claimed that after the sharing, they think that the transformation of teaching and learning by e-learning is more feasible than they expected. (see Appendix III for the photos of the event and the report of the Central Committee for Diocesan Schools http://www.ceo.org.hk/Sharing/20101014/e 世代法律講座_14_10_2010.doc)
--	--	--	---	--	---



6. Difficulties Encountered and Solutions Adopted

At the beginning of the project, our P1 pupils were not skilful on manipulating the lessons through computers. They also were not active on practicing the lessons at home as they were not aware that it was part of their home learning process. In order to overcome this problem, we arranged after-school sections to guide and facilitate their learning experience. After a month of practise, pupils were all able to master the courseware independently and developed by their self-learning habits.

Similarly, our parents did not understand the concepts and importance of the project. After the Parent Seminars on July and November, the majority of them fully understand the projects and are able to monitor their children's learning process and even provide necessary support to them at home.

As we intend to avoid similar difficulties in the future, we will arrange pre-bridging sessions to our new P1 pupils along with their parents during the summer. We believe that this may reduce the amount of time for them to accommodate this project. In order to sustain the outcomes, our service provider () has agreed to help us to enhance the programme in the future. They will also provide additional learning activities, which typing skill is not required. By doing so, we believe that our new P1 pupils (2010/11) will be more engaged in the programme.



Appendix I – Budget Checklist

Budget Items <i>(Based on Schedule II of Agreement)</i>	Approved Budget (a)	Actual Expense (b)	Change [(b)-(a)]/(a) +/- %
<u>Hardware (Server) and software license</u> (Project Variation-as stated in the progress report: Since the service provider we chose covering us 5 years' free hosting service and maintenance for the project, we use the budget under Hardware (server) and software license for the Mbook printing.) <ul style="list-style-type: none"> • Printing for the Mbook 	\$20000	\$20014	100.07%
<u>Equipment</u> <ul style="list-style-type: none"> • 5 Netbooks + headphones 	\$25000	\$25600	102.4%
<u>Service</u> <ul style="list-style-type: none"> • Development & consultation of M^{book} • Development of assignments & assessment • Development of the e-Portfolio System • M^{book} content license • Courseware /LMS support 	\$389,900	\$389900	100%

Appendix II – Research Findings of Interactive Learning

St. Andrew's Catholic Primary School Research Findings of Interactive Learning

School Background

- Serves the students from Tseung Kwan O, Sai Kung and Kwun Tong Districts
- Resourceful, supportive & experienced Principal
- Cooperative, supportive & experienced teachers
- Local students with fair language background and limited parents support

Researcher

Dr. [Name], PhD (Lond), Co-Director, Assessment Research Centre, Hong Kong Institute of Education

Research Goals

1. To measure the learning effectiveness of integrating an online interactive learning program (Fun n' Friends) into the school-based e-curriculum, on P1 pupils' listening, reading, vocabulary and written language structures.
2. To compare the English language ability and improvement level between P1 & P2 pupils towards the end of the programme.

Observations

1. The English language ability of 2009 P1 pupils' intake is the same as the previous year.
2. The P1 pupils have started the interactive programme since summer holiday to become familiar with Fun n' Friends before they started using it in regular classes.
3. Parents seminar was held to introduce the programme to the parents and gain their support.
4. Training sessions for parents were conducted to teach them how to use the programme and monitor their children.
5. School-based print-based student workbooks are available for:
 - Teacher to teach in class; and
 - Students' home revision

Participants

- 120 X P1 pupils
- 120 X P2 pupils
- 6 English teachers

Research Procedures (Updated: Dec 2009)

Preparation

1. Teacher Training (2 Sessions)
2. Parents Seminar (3 Sessions)
3. Student Orientations

On-going tasks

4. Arrange bi-weekly curriculum co-planning meeting
5. Test out and enhance the classroom teaching resource
6. Provide assessment to P1 & P2
7. Discuss research procedures and implementation

Evaluation

8. Evaluation
9. Prepare questionnaires for teachers & students
10. Collect and analyzed survey results
11. Compare P1 & P2 Assessment Results
12. Analyze research data
13. Present research findings and survey results
14. Provide recommendations

Results

Students' Performance:

1. Finding I – Comparison between P1 & P2

- P1 & P2 students were asked to complete:
 - 2 assessments in January 2010
 - 2 assessments in June 2010
- The assessments were:
 - extracted from the learning materials of P1
 - to assess students' English skills on listening, vocabulary and grammar
- In the January assessment:
 - Assessment A: 92% of the P1 students were at average or above while 52% of the P2 students had comparable results
 - Assessment B: 88% of the P1 students were at average or above while 60% of the P2 students did so
- In the June assessment:
 - Assessment A: 83% of the P1 students were at average or above while 67% of the P2 students did so
 - Assessment B: 84% of the P1 students were at average or above while 74% of the P2 students did so
- **Conclusion: P1 students have consistently out-performed P2 students in all the assessments**

2. Findings II – Achievement of the P1 students

- 3 sets of holiday assignments were assigned to the students during Christmas, Chinese New Year and Easter respectively
- Each set of the holiday assignment includes 4 interactive lessons



- Christmas Holiday Assignment:
 - 60% of the students had 100% completion rate
 - 19% of the students had 100% completion rate and achieved an average of 90% or above
- Chinese New Year Holiday Assignment:
 - 65% of the students had 100% completion rate
 - 34% of the students had 100% completion rate and achieved an average of 90% or above
- Easter Holiday Assignment:
 - 77% of the students had 100% completion rate
 - 35% of the students had 100% completion rate and achieved an average of 90% or above
- **Conclusion: The majority of the students engaged to the interactive lesson and over one-third of the students achieved outstanding results**

3. Findings III – Achievement of the P1 students in an inter-schools interactive learning programme – Fun n' Friends

- Our P1 students were competed against more than 500 students from 20 primary schools
- (1B) received 3 awards: *Top Achievers*¹, *Best Improvement*² and *High Distinction*³
- (1E) received 2 awards: *Pupil of the Year*⁴ and *High Distinction*
- (1A), (1E) and (1C) received 2 awards: *Top Achievers* and *High Distinction*
- (1E) received *High Distinction*
- (1D) received *Distinction*⁵

Students' Feedback on the Interactive Learning:

1. Self-evaluation on the improvement of various English skills

¹ Top Achievers: Top 50 students in the level with an average score of 85% or above

² Best Improvement: The student who has improvee the most throughout the year in the level

³ High Distinction: Students had 80% completion rate with an average score of 90% or above

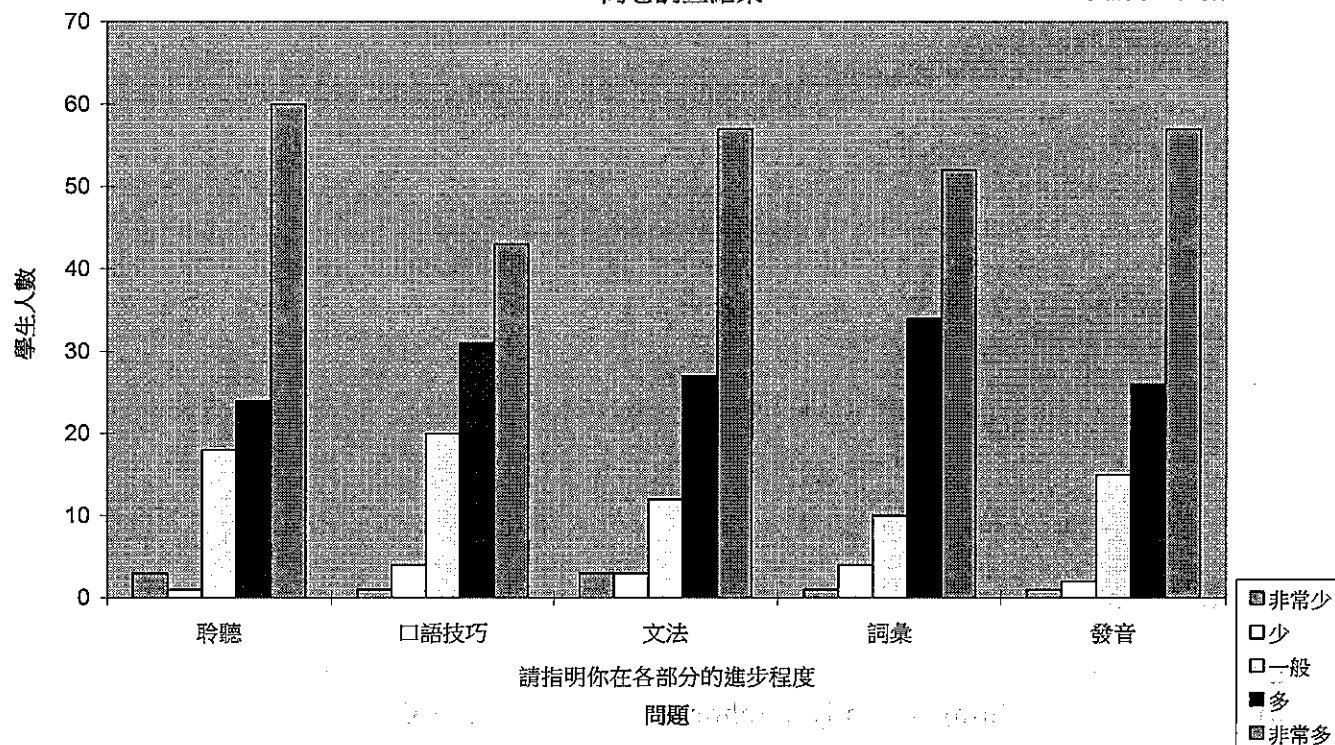
⁴ Pupil of the Year: The student completed the most lessons in the level with the highest accumulative score

⁵ Distinction: Students had 80% completion rate with an average score of 80% - 89%



天主教聖安德肋小學
問卷調查結果

對象：小一學生
受訪學生人數：106人



- **Conclusion:** The majority of the students are engaged to interactive learning, and believed that they have improved their English in various aspects

FOUR Success Factors

- The Principal: A strong administration is a key success factor to mobilize all possible resources;
- Teachers: Supportive teachers effectively conduct, facilitate and monitor the progress of the programme;
- Services provider on-going update and improve the programme as per teachers' requirements
- Parents: Understanding and supportive parents help monitoring and encouraging the students.