

Impact Assessment of Continuous Improvement Projects (CIP) on Schools' Performance in the Division of Antipolo City

Dr. Jonathan P. Domingo, Irene C. Domingo, Ian Ismael E. Marces

Department of Education, Division of Antipolo City, Philippines

Abstract – *The purpose of the study is to determine the impact of the completed Continuous Improvement (CI) projects on schools' performance. Qualitative method was utilized to analyze the submitted CI and BEIS reports of the eight schools in the Division of Antipolo City that were able to complete their CI project successfully in three consecutive years. Thematic analysis was applied to determine how CI helped improve the schools and identify the challenges encountered in implementing it. Findings revealed that most of the schools are more focused on improving their Achievement rate than the other Key Performance Indicators (KPIs). The performances of the schools in terms of Dropout has improved after the CI implementation. On the other hand, the performances of the schools in terms of Repetition did not improve because there were no CI projects conducted focused on it. Finally, the impact on the performances of the schools after the implementation of continuous improvement projects in terms of Achievement has improved and attained the "Nearly Proficient" level. The implementation of CI projects helped the schools in various aspects like improvement of performance indicators (non-behavioral), improvement of behavior of learners, teachers, school heads and stakeholders. The schools encountered several challenges in implementing CI projects which include controllable (Time, Workloads, Materials/Equipment/Competency) and uncontrollable elements (Teachers attitude and Parents' Support). The proposed Action Plan is highly recommended for implementation to improve the schools' performance.*

Keywords – *Division Education Development Plan (DEDP), Key Performance Indicators (KPI), Dropout, Repetition, Achievement, Continuous Improvement Project (CIP)*

INTRODUCTION

The Department of Education (DepEd), in collaboration with the Australian AID's (AusAID) and the Philippines Australian Human Resource and Organizational Development Facility (PAHRODF) launched the Continuous Improvement (CI) Program in July 2013. It was first implemented in 5 regions, 9 divisions, and 34 schools in the country by offering not just competency building through trainings and workshops for educators but by providing coaching for them. Furthermore, it aims to enhance the skills of any school official in managing school processes and turn schools into learner-centered institutions that continually improve and build on its best practices. The program focused in five major categories; teaching-reading, teaching Mathematics, managing waste and

feeding program, managing class attendance, and delivering remedial Science and other major subjects. In support of this, the Department of Education issued DepEd Order No. 44 s. 2015, re: Guidelines on the Enhanced School Improvement Planning (SIP) Process and the School Report Card (SRC) which stipulates that with Continuous Improvement, the planning process becomes more evidence-based, responsive, and systematic. [3]

In DepEd Antipolo City, CI project was first piloted in 4 schools namely; Antipolo NHS, san Isidro NHS, Mambungan I ES and Dela Paz ES. The following year, there were 19 CI completers and since then the number of schools conducting CI projects has increased and these were successfully showcased in the annual CI Symposium. In the last CI Symposium held at Gems Hotel, 25 CI projects

were presented. All of these CI projects were proven to be effective based on the implementation results.

However, while it is true that the completed CI projects yielded positive outcomes to different schools, its impact in the school in terms of the improvement of schools' performance after implementing it for three consecutive years is yet to be determined. It should be noted that the identified priority improvement areas in the CI projects are directly linked to the school measures. Hence, this study was initiated to determine the impact of the CI projects in the schools' performance.

Brief Review of Related Literature

According to the Hanover Research (2015), school improvement planning is a systematic, data-driven process for planning and evaluating improvement over time. Distinct from institutional research and auditing, improvement planning aims to reduce the gap between the school's current level of performance and its potential performance [1].

Krajewski, et al. (2013) stated that CI is based on a Japanese concept called Kaizen, the philosophy of continually seeking ways to improve operations. Hence, it involves identifying excellent practices and instilling a sense of employee ownership of the process [2].

According to Sparks (2018), continuous school improvement is a cyclical process that is intended to help groups of people in a system from a class to a school district or even a network of many districts to set goals, to identify ways to improve, and to evaluate change. The most common approaches seem to share a few concepts; these include: (1) looking at problems as part of the whole system rather than as isolated episodes, (2) working to improve policies and processes within that systems, (3) repeatedly testing assumptions about the causes of problems and their possible solutions, and (4) involving those most affected by change-like teachers and students-in deciding what tweaks to make [3].

From the case study conducted by Molina (2013), she mentioned that one of the secrets of their CI's success was the encouragement they continuously receive from their principal who gave them all-out support to their CI project. In fact, with the guidance and help of their principal, the team is set to expand its CI program next school year and apply it on other subjects like Math and Science [4].

The study of Llantos and Pamatmat (2016) concluded that Total Quality Management (TQM) practices which are focused on leadership, on clientele/stakeholder, on commitment to change and continuous improvement, on data-based decision-making, on professional learning, and on the system which were found to have relationship to school leadership and improvement in terms of staff development. Likewise, SBM practices concerning to school leadership, school improvement process, and school performance accountability were found to have a relationship to school leadership and improvement in terms of staff development [5].

The study of Domingo, et al (2018) revealed that CI improved the SBM level of practice of the schools through its Key Result Areas such as Access, Efficiency, Quality, and Governance. This study helps in the promotion of the importance of CI to improve the school's SBM level of practice [6].

Krajewski, et al. (2013), and Sparks (2018) discussed the concepts and implementations of CI. Molina (2013) gave her comments on how continuous improvement program brings out the quality in teachers to provide quality education [2]. Llantos and Pamatmat (2016) shared their ideas on strategic planning, operational goals, and using data for decision making, TQM, and SBM, and explained how CI education is the way to develop the country [5]. Meanwhile, the study of Domingo, et al (2018) presented the effect of CI to SBM level of practice. However, their studies failed to show specifically how the implementation of the CI projects helped improve the schools' key performance indicators [6].

OBJECTIVES OF THE STUDY

The study aims to evaluate the impact of continuous improvement projects on schools' performance of selected public schools in the Division of Antipolo City.

Specifically, this study sought to find answers to the following questions:

1. What are the continuous improvement projects conducted by the schools in terms of the following DEDP Key Performance Indicators?:
 - 1.1 dropout;
 - 1.2 repetition; and
 - 1.3 achievement rate?

2. What are the performances of the schools before and after the implementation of continuous improvement projects in terms of the above-mentioned indicators?

3. How do CI projects help improved the performance of the schools as perceived by the CI implementers?

4. What are the challenges encountered in implementing CI projects on school performance indicators?

5. What Action Plan can be proposed based on the findings of the study?

MATERIALS AND METHODS

This study focused only on eight (8) schools in the Division of Antipolo City comprising of five (5) elementary and three (3) secondary levels that were able to complete and present their CI projects for three (3) consecutive years in the Annual Division CIP Symposium. Also, it only focused on the DEDP key performance indicators such as dropout, repetition and achievement rate from SY2016-17 up to SY2018-2019 because there is no EBEIS data yet available for SY2019-2020. Furthermore, there are no available data on SY15-16 to SY2018 in Achievement because NAT was administered on selected schools

RESULTS AND DISCUSSION

Table 1. List of CI Projects Completed in Terms of Key Performance Indicators

Schools	SY 2016-17	KPI	SY 2017-18	KPI	SY 2018-19	KPI
Dela Paz ES	RULT	A	LIFE	A	RULT2	A
Mambugan 1 ES	Agham	A	Agham 2	A	Agham 3	A
Nazarene Ville ES	ISRAEL	A	ZERO	A	K to 1 CORES	A
Peace Village ES	K-PARDOS	D	READ	A	READ Plus	A
Sapinit ES	SIKAP	A	ITURO	A	ITURO2	A
Mayamot NHS	RESEE	A	SAVED	D	CARE	D
San Isidro NHS	READERS	A	IMPACT	A	READ	A
San Jose NHS	ISPID	A	DD-COUNT	A	EGCITE	A

Legend: D – Dropout, R – Repetition, A – Achievement

The table 1 shows the list of CI Projects completed by the selected schools in terms of the DEDP Key Performance Indicators (KPIs) particularly the Dropout (D), Repetition (R), and Achievement (A) from SY2016-17 to SY2018-19.

only (sampling). Hence, in the absence of NAT results, the researchers utilized the Periodical Test Results from SY2016-17 to SY2018-19. Periodical Test Results in SY2015-2016 can no longer be retrieved.

This study utilized qualitative research through the analysis of submitted CI and BEIS reports. Record on school CI projects completed for the last three years were consolidated. Each CI project was classified according to the performance indicator being addressed. Furthermore, BEIS data on dropouts, repetition, and achievement rate before and after the implementation of the CI projects were also consolidated and analyzed.

In addition, a semi-structured interview using open-ended questioning. The questions were sent to all the participants and completed at their own pace and had time for reflection. Afterwards, thematic analysis was applied. The responses of the CI implementers as to how CI helped improve their schools' performance as well as the challenges encountered during the implementation of the CI projects were transcribed, encoded, and categorically grouped. This was analyzed and interpreted with themes.

It can be gleaned from the table that majority of the completed Continuous Improvement (CI) projects in the schools (elementary and secondary) were focused on improving the Achievement rate. It also shows

that there were few CI projects on dropout and no CI projects completed yet on Repetition.

This implies that most of the schools are more focused on improving their Achievement rate than the other Key Performance Indicators (KPIs).

Table 2. Schools' Performance Before and After the Implementation of the Continuous Improvement Projects (CIP) in terms of the Key Performance Indicators

Schools	Before			After								
	SY 2015-16			SY 2016-17			SY 2017-18			SY 2018-19		
	D	R	A	D	R	A	D	R	A	D	R	A
Dela Paz ES	6.63	0.98	No Available Data	4.02	2.76	70.98	2.87	3.74	68.17	2.71	3.87	75.09
Mambugan I ES	3.60	1.41		3.44	3.01	81.73	2.32	1.60	71.98	1.84	1.49	77.46
Nazarene Ville ES	3.44	0.57		1.56	4.77	74.01	0.41	2.44	63.69	0.24	1.42	68.46
Peace Village ES	2.50	0.26		2.35	2.26	81.99	1.45	1.91	74.11	1.44	0.97	77.33
Sapinit ES	2.26	2.36		3.10	4.30	55.67	0.61	5.82	63.98	0.61	5.28	66.34
Mayamot NHS	5.36	2.25		7.07	10.70	49.70	2.66	6.85	46.28	4.49	7.84	51.23
San Isidro NHS	7.47	2.58		7.59	9.56	50.80	6.77	9.45	48.65	7.11	10.42	50.69
San Jose NHS	5.82	1.50		8.94	6.97	54.05	6.75	6.61	53.41	5.07	5.97	47.48
Average	4.64	1.49			4.76	5.54	64.87	2.98	4.80	61.28	2.94	4.66

Legend: D – Dropout, R – Repetition, A – Achievement

The table 2 shows the schools performances before and after the implementation of continuous improvement projects in terms of the Key Performance Indicators (KPIs) particularly the Dropout (D), Repetition @, and Achievement (A) from SY2015-16 to SY 2018-19.

Compared with SY2015-16, it can be perceived from the table that the dropout rate of all the schools decreased in the succeeding years especially in SY2018-19. The dropout rate improved during those years where the schools conducted CI project on dropout rate. Their dropout rate was reduced compared with SY 2015-16 when CI was not yet being implemented.

The table also indicates that the repetition rate of all the schools has increased for the last three years. In addition, the

repetition rate of all the schools was even higher than SY 2015-2016.

Although there was no periodical test result available on SY2015-16, it can be seen from the table that the Achievement Rate for the last three years based on the Periodical Test Results were all “Nearly Proficient” (50.00-74.00 = Nearly Proficient).

This implies that the performances of the schools who conducted CI projects in terms of dropout has improved after its implementation. On the other hand, the performances of the schools in terms of repetition did not improve because there were no CI projects conducted focused on it. Lastly, the impact on the Achievement Rate of the schools after the implementation of continuous improvement projects increased and attained the “Nearly Proficient” level.

Table 3. Responses of the School Heads and CI Team Leaders as to How CI Projects Helped Improve the Performance of their School

Behavioural	Non-Behavioural
<p>A. On Learners</p> <ol style="list-style-type: none"> 1. Learners became more interested in Science. 2. Decreased in the number of recorded behavioural problems in the guidance office and the office of the prefect of discipline. 3. There was an improvement in the performance output of the students in terms of hands-on activities. 	<p>A. On Performance Indicators</p> <ol style="list-style-type: none"> 1. Improved the reading ability and comprehension of our pupils. 2. Increased of MPS in different subject areas. 3. Improved the academic performance specifically in Science subjects. 4. It helped us improved the literacy rate po where the number of non-readers are lessened and improved the comprehension skills of our learners... 5. It also have an impact po on our dropout rate. 6. We lessen the no. of our non-readers po 7. We reduced our dropout rate 8. It helped improve school performance systematically by exploring the root causes and how they will be resolved through analytical procedures with initiatives of the team. 9. Helped decrease number of non-readers. 10. There was a significant decrease in the number of frustration readers and non-numerates 11. CI is really great help in our School Performance especially in terms of Quality in SBM because it lessen the non-numerates and non-readers. 12. There was an increase in the results of students' academic performance based on the results of the quarterly exams in comparison with the past school years
<p>B. On Stakeholders</p> <ol style="list-style-type: none"> 1. It created active involvement of stakeholders who took part in the project 2. CI directly addressed the schools' priority improvement areas with a strategic, cost effective and downright solution which involved the school head, teachers and stakeholders for the betterment of our pupils Gave opportunity to partner with other school in solving school problems 	
<p>C. On Teachers</p>	

1. It fostered camaraderie and collaboration of team members to developed strategies to better improve CI implementation
2. Improve the teaching and learning process of the Science teachers
3. Teachers were challenged to be more innovative and extend more time in handling children with learning needs.
4. Teachers learned to make sense of all available data such as results of diagnostic test, formative and summative tests, quarterly exams, NAT, Pre- Reading Inventory, students' attendance, etc. and utilize these data to improve school performance
5. Teachers learned to self-reflect on their teaching practices and improved their teaching competencies, classroom strategies and delivery of instruction by attending LAC sessions and receptiveness to TA through mentoring/coaching to continuously improve themselves.
6. Gave teachers the opportunities to discover ways and means on how problems will be solved thru different strategies
7. Discovered some ways on how pupils will be given extra time in improving their Math skills.
8. Have the courage to join different division category competitions.
9. Gave us right strategies that suited to the needs of our learners that can contribute to the success of our performance.
10. It enhanced school practices and strengthen pupils skills.
11. We learned the value of school accomplishments and worked to improve more
12. We are empowered to plan and prioritize school problems in terms of low school accomplishments
13. Helped the school plan out different ways on how learners and parents helped one another in addressing their needs.

On School Heads

1. We can easily determine and bridge the gap the problems that we encountered in our school.
2. Helped our school in the systematic implementation of our program and have basis on how we address solutions on the problems that the school encountered

<ol style="list-style-type: none"> 3. CI process helped us see and evaluate the current status of the school. 4. We were able to appreciate the voices of the customer and validate it through observation. 5. It developed positive culture and attitude in the school, working as one team for achieving quality results. 6. Identified and focused on what matters most for improvement. 7. Monitoring and evaluation became an essential practice in the school to monitor progress and gather feedbacks in improving school practices. 8. It helped address the priority needs of the pupils, teachers and school as well. 9. Through CI, we were able to target the main challenges/problem experienced. 10. Implementation of continuous improvement in our school made a major cultural shift in solving problem. 11. Helped us plan-out and visualize more programs next year 12. Served as avenue for our school to improve our accomplishments in SBM (maturing) 	
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The table 3 shows the responses of the school heads and CI team leaders as to how CI projects helped improve the performance of their school. The responses were categorized as Behavioral and Non-Behavioral. The

behavioral includes responses On Learners, On Stakeholders, On Teachers and On School Heads while non-behavioral includes On Performance Indicators.

Table 4. Challenges Encountered in Implementing CI Projects on School Performance Indicators

Controllable	Uncontrollable
<p>A. Time</p> <ol style="list-style-type: none"> 1. Conflict of schedules 2. The time / schedule of each member of the ci team - availability of the team members 3. Common time of the CI team members for the face to face meeting and consultation 4. Conflict of vacant time of ci members 5. Finding common time for the CI Team to meet regularly due to many other work loads 6. Teachers schedule on how the program will be implemented due to other school activities and paper works 7. Overlapping of activities 8. Time management 	<p>A. Teachers' Attitude</p> <ol style="list-style-type: none"> 1. Unable to get the 100 percent cooperation of project implementers 2. Other teachers are not cooperative 3. Cooperation of teachers in implementing the activities. 4. Commitments from different persons involved 5. Acceptance on the results of the VOC. some were hesitant to serve as an instrument for validation 6. Negative attitude of some teachers who believe that it is again another task for them to do aside from their regular loads

<p>B. Work Loads</p> <ol style="list-style-type: none"> 1. Load of teachers not related to teaching (ancillary services) 2. Teachers other ancillary works 	<p>B. Parents' Support</p> <ol style="list-style-type: none"> 1. Lack of support of parents 2. Uncooperative parents 3. Lack of involvement of some parents 4. Poor parents' commitment 5. Lack of follow-up of parents at home
<p>C. Materials/Equipment</p> <ol style="list-style-type: none"> 1. Insufficient reading materials that are suited to the reading level and needs of the students, 2. Lack of laboratory materials 	
<p>D. Competency</p> <ol style="list-style-type: none"> 1. New teachers - we need to update them from time to time about our CI projects. 2. Basic knowledge on the concept of Continuous Improvement Plan of the team. 3. We forgot how to do the next step 4. Not all CI teams created were confident enough to handle the program. 	

The table 4 shows the responses of the school heads and CI team leaders on challenges encountered in implementing CI projects on school performance indicators. The responses were categorized as Controllable and

Uncontrollable. The controllable includes responses Time, Work Load, Materials/Equipment and Competency while uncontrollable includes responses Teacher's Attitude and Parents' Support.

Table 5. Plan of Action that could be offered by the Schools Division Office

Below is the plan of action to address the identified issues to improve further the implementation of CI projects in the Division of Antipolo City.

Division CIP Action Plan				
Objectives	Strategies/ Activities	Persons Involved	Timeline	Expected Outcome
<p>a. Increase the number of CI completers from 25 to 33 in the Division of Antipolo City</p>	<ul style="list-style-type: none"> • Conduct Capacity-Building on CIP for School Heads and Team Leaders. • Ensure that PPAs in the ESIP/AIP are crafted using CI. • Conduct CI Symposium and Exhibit to showcase successful CI projects and recognize invaluable 	<p>SDS ASDS Chiefs Division CI Coaches EPS PSDS</p>	<p>June 2020 – March 2021</p>	<p>Increased Divisions of SDO Antipolo City.</p>

	<p>contributions of CI implementers.</p> <ul style="list-style-type: none"> • Conduct FTA to provide TA in addressing the challenges being encountered in the implementation of CI. • Conduct regular communication with CI implementers through various modes such as FB, GC, Video Conference, SMS, Face-to-Face, etc. • Strengthen advocacy campaigns during Stakeholders Summit. • Encourage School Heads to recognize CI Implementers and supportive stakeholders during Recognition day. • Encourage CI implementers to convert CI projects into action research and have it presented in various research conferences. • Include CID personnel in the FTA Team to provide TA concerning Teaching-Learning Process. • Provide the CID with the results of CI projects related to teaching-learning process for parallel study and provision of TA. • Recognize outstanding CI Implementers during the Annual Hamaka Awards of Excellence in Education. 	<p>School Heads</p> <p>CI Team Members</p> <p>Other Stakeholders</p>		
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CONCLUSIONS AND RECOMMENDATIONS

Based on the findings of this study, the following conclusions were drawn:

1. Most of the schools are more focused on improving their Achievement rate than the other Key Performance Indicators (KPIs).
2. The performances of the schools in terms of Dropout has improved after the CI implementation. On the other hand, the performances of the schools in terms of Repetition did not improve because there were no CI projects conducted focused on it. Finally, the impact on the performances of the schools before and after the implementation of continuous improvement projects in terms of

Achievement cannot be determined due to absence of data.

3. The implementation of CI projects helped the schools in various aspects like improvement of performance indicators (non-behavioral), improvement of behavior of learners, teachers, school heads and stakeholders.

4. The schools encountered several challenges in implementing CI projects which include controllable (Time, Workloads, Materials/Equipment/Competency) and uncontrollable elements (Teachers attitude and Parents' Support).

5. The Schools Division Office should develop an Action Plan that will address the

challenges encountered by the CI implementers in order to help them improve their schools' performance.

Based on the findings and conclusions of this study, the following are hereby recommended:

1. Schools should check and analyze their schools' performance and consider conducting intervention activities such as but not limited to CI project. Furthermore, they should ensure that such intervention/project is/are included in their ESIP/AIP.

2. The Top Management should continue to recognize the outstanding services and performances of the employees in the different Functional Divisions in order to motivate them and the rest of the personnel to perform well and contribute achieving the institutional goals.

3. CI projects that yielded positive outcomes should be sustained or improved further by the schools. Successful CI Projects should be presented and recognized by the Division Office.

4. Regular monitoring and evaluation as well as technical assistance should be provided by the Division personnel in order to address the challenges being encountered by the CI implementers. 5. A parallel or similar study may be conducted using different setting and variables.

6. The proposed Action Plan is highly recommended for implementation to improve the schools' performance.

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