TEACHER ACTION RESEARCH: ITS DIFFICULTIES AND IMPLICATIONS

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ABSTRACT

Purpose: This study generally aimed to (1) identify the most difficult part of the action research process as evaluated by the teachers; (2) find out implications of conducting action research in teaching-learning process; and (3) identify the impact on teachers’ current and future instructional practices in conducting action research.

Methodology: Mixed method design which involves quantitative and qualitative methods of research was used. High school teachers in Colegio de San Juan de Letran Calamba who conducted action researches from 2012 - 2015 were the respondents of the study. The total number of teachers involved in action research projects is 27 - 41% from the Mathematics-Science and Technology cluster, 37% out of 27 from Socio-Linguistic Cluster, and 22% come from the MAPEH-TLE Cluster. These teachers then answered the survey instrument adapted and modified from the study of O’Connor, Greene, and Anderson (2000).

Main Results: Based on the results, writing the Framework of the Study is the most difficult part. All teachers agreed that action research is valuable to the teaching-learning process for both teachers and students. On the other hand, almost all of the teachers said that action research project positively impacted both students’ learning and teaching. This proves that action research as viewed and assessed by teachers has a major role in improving the teaching-learning process. Likewise, teachers proved that involving oneself in action research leads to professional growth of their career through ranking and promotions. School setting and curriculum have been improved through the positive results gained in action researches. Knowledge of statistics or data analyses was one of the hindrances encountered by teachers in conducting action research. It appears that time spent in conducting action research is one big factor that makes this activity difficult for teachers.

Implications: Parts of action research, which were considered very difficult for teachers should be the focus of training and development for teachers. Likewise, the number of teaching load and teacher tasks require too much time that they cannot devote for research. Thus, In order for teachers to conduct researches, there should be lesser teaching load to provide extra time for institutional researches and support more teacher researchers.

Limitations: The results of the evaluation of the teachers to the questionnaire were the bases in drawing out conclusions. Moreover, the effect of conducting action research through experimentation was not included in the study.

Keywords: Teacher Action Research, Instructional Practices, Mixed method Design, Teaching-Learning Process, Calamba City, Laguna, Philippines

INTRODUCTION

According to Gorski (2015), Teacher Action Research (TAR) is a method for educational practitioners to engage in the assessment and improvement of their own practice. It can be an individual tool, helping classroom teachers reconsider their teaching methods or to adapt in order to solve a problem. It can also be a community activity, helping teams of educators assess problems in schools, enact changes, and reassess. Doing action research facilitates evaluation and reflection in order to implement necessary changes in practice – both for an individual and within an institution – with increased understanding and confidence. Evaluating one’s own practices is an integral part of an applied discipline such as education (Koshy, 2005).

However, for the past several years that research has been implemented as one of the Faculty Development Activities (FDA), there were changes in the number of faculties involved in action research. This research then checked the difficulties met by teachers in conducting action research.

Moreover, this research provided information on how action research helped in the teaching-learning process by identifying problems encountered and how to answer the said problem by conducting action research. According to Sager (2000), there are reasons why teachers need to conduct research these are to: professionalize teaching; enhance the motivation and efficacy of a weary faculty; meet the needs of an increasingly diverse student body; and achieve success with “standards-based” reforms. In addition, action research can empower teachers to change by pushing a teacher out of his/her comfort zone. Many times, for personal and professional growth to occur, being pushed out of a comfort zone is challenging. These challenges are necessary, particularly related to classroom practice, in order to lead to positive change as stated by O’Connor, Greene, and Anderson (2006). Practicing the strategies and skills of teacher action research can help aspiring teachers in designing their own meaningful pedagogy, shift the identity of teacher as expert to one of inquirer, and make it more difficult to take the dynamics of the classroom for granted (Pine, 2009).
Determining the difficulties met by teachers in conducting action research served as a way on how administrators act on the number of teachers not considering research as their faculty development activity. In addition, this research also identified the importance of conducting action research on teaching-learning process.

**LITERATURE REVIEW**

The *Alberta’s Teacher Association (2000)* states that action research process can generally be described as a series of four steps: *planning, action, observing* and *reflecting* on the results of the action. The action research processes provide itself to a spiral of cycles, with the researcher reflecting on each stage of the process. Each reflective phase gives in more information about the issue and increases the researcher’s understanding. Thus, reflection is the most important part of conducting action research. The diagram below illustrates the notion that the action research process is a series of steps or actions, propelled by reflection (*The Alberta’s Teacher Association, 2000*). This also shows that activity is affected by the factor of time.

![Activity vs. Time in Conducting Action Research](image)

Likewise, in the study conducted by *Brown (2002)* also said that the four specific areas of investigation were teachers’ perceptions about (a) the overall teacher role, (b) teachers’ knowledge about teaching, (c) teaching practices, and (d) reflective practices.

In the context of this research, the researcher was triggered with the current condition of high school teachers who chose to conduct research as their Faculty Development Activity (FDA) considering that most of the teachers were involved in doing research since it was implemented in 2012. There were only few teachers now who conduct research under the FDA. In addition, factors that affect teachers’ initiatives and its implications in doing researches were also identified. The result of the study would then be the bases of developing plans on how to help teachers in conducting action research.

**METHODOLOGY**

**Research Design**

This research study used the mixed method design which involves quantitative and qualitative methods of research. According to *Calderon and Gonzales (2006)*, there are three techniques under the descriptive method of research: (1) the survey, (2) the case study, and (3) content analysis. Specifically, survey and content analysis were used in this study. Survey, otherwise known as normative survey, is a fact-finding study with adequate and accurate interpretation. It is used to collect demographic data about people’s behavior, practices, intentions, beliefs, attitudes, opinions, judgments, interests, perceptions, and the like and then such data are analyzed, organized, and interpreted. Similarly, content analysis as a research technique deals with documentary materials that are already existing and available (*Calderon and Gonzales, 2006*).

**Research Locale**

This study was conducted at Colegio de San Juan de Letran Calamba located at Bucal, Calamba City, Laguna. From 1995 up to the present, Letran Calamba had strengthened its research culture through students and institutional researches. In addition, the Research Department of the Colegio gives incentives to faculty and employees who present researches and publish research papers locally and internationally.

**Respondents**

The total number of teachers involved in action research projects from 2012-2015 is 27. There were 11 teachers or 41% out of 27 from the Mathematics-Science and Technology cluster (Table 1). Teachers in this cluster handle Mathematics, Math Electives such as Business Mathematics, Basic Statistics, Advance Statistics, Linear Algebra, and Calculus, Science, and
Science Electives such as Robotics from Grade, Science Research, Computer, and Biochemistry.

<table>
<thead>
<tr>
<th>Table 1. Profile of Respondents</th>
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<tbody>
<tr>
<td>Cluster</td>
</tr>
<tr>
<td>Mathematics-Science</td>
</tr>
<tr>
<td>MAPEH-TLE</td>
</tr>
<tr>
<td>Socio-Linguistic</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

There are 10 teachers or 37% out of 27 from Socio-Linguistic Cluster (Table 1). Teachers in this cluster teach English, Filipino, *Araling Panlipunan, Edukasyon sa Pagpapakatao*, Christian Living Education and elective subjects such as Theater Arts, Developmental Reading, Introduction to Communication Arts, Public Speaking, and Business Speaking.

Lastly, 22% or 6 out of 27 come from the MAPEH-TLE Cluster (Table 1). Music, Arts, Physical Education, Technology and Living Education, Electronics, and Baking are the subjects being taught in this cluster.

### Data Collection Instrument and Technique

The researcher identified high school teachers who have been involved in conducting action research from 2012 to 2015. These teachers then answered the survey instrument adapted and modified from the study of *O’Connor, Greene, and Anderson (2000)*. However, there were some revisions made in the said questionnaire. This was then validated by the Research Department of the Colegio. In the first section, the respondents were asked to rate the difficulty teachers experienced with components of the action research process. The rating scale for section one was a five-point Likert scale.

<table>
<thead>
<tr>
<th>Table 2. Five-point Likert Scale</th>
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<tbody>
<tr>
<td>Rating</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>1</td>
</tr>
</tbody>
</table>

After each question in the first section, a space was available for the respondent to explain his/her reason for choosing that level of difficulty. The next section consists of five statements regarding the value of their action research experience. Respondents answered “Yes” which indicates he/she agrees with the statement and “No” if otherwise. The statements follow: 1) Action research is valuable to the teaching and learning process for me as a teacher, 2) Action research is valuable to the teaching and learning process for my students, 3) This action research project positively impacted my students’ learning, 4) This action research project positively impacted my teaching, and 5) I view myself as a teacher-researcher. Again, following each statement, a space was provided for the respondent to explain his/her choice.

The final section of the survey has four open-ended questions. Three of the questions asked how participation in action research had impacted their professional careers, teaching, and instructional practices. One question asked about issues that arose during the implementation of the action research project and how he/she solved them. Space was provided after each question for written elaboration.

### DATA ANALYSES

Frequency count, mean, ranking, and standard deviation were utilized to analyze the data gathered. The rating scale has the following interpretations range:

<table>
<thead>
<tr>
<th>Table 3. Interpretation of Teachers’ Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range</td>
</tr>
<tr>
<td>4.50 to 5.00</td>
</tr>
<tr>
<td>3.50 to 4.49</td>
</tr>
<tr>
<td>2.50 to 3.49</td>
</tr>
<tr>
<td>1.50 to 2.49</td>
</tr>
<tr>
<td>1.00 to 1.49</td>
</tr>
</tbody>
</table>

Data from the surveys were examined using qualitative analysis techniques, specifically content analysis. This was used to analyze the answers of the respondents. Content analysis entails developing categories and then counting the frequency of instances when those categories occur (Silverman, 2001 in *O’Connor, Greene, and Anderson, 2006*).
Most Difficult Part of Action Research Process

Teachers were asked to rate the level of difficulty they encountered in doing each part of the 6 chapters as suggested by the Research Department of the Colegio in conducting research: Chapter I as Introduction, Chapter II as Review of Related Literature, Chapter III as Framework of the Study, Chapter IV as Methodology, Chapter V as Results and Discussion, and finally Chapter VI as Research Implications.

Table 4. Most Difficult Part of Action Research Process

<table>
<thead>
<tr>
<th>Ch.</th>
<th>Mathematics-Science &amp; Technology</th>
<th>MAPEH-TLE</th>
<th>Socio-Linguistic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Wt. X</td>
<td>SD</td>
<td>Rank</td>
</tr>
<tr>
<td>I</td>
<td>2.76</td>
<td>0.353</td>
<td>4</td>
</tr>
<tr>
<td>II</td>
<td>3.55</td>
<td>0.934</td>
<td>2</td>
</tr>
<tr>
<td>III</td>
<td>3.91</td>
<td>0.701</td>
<td>1</td>
</tr>
<tr>
<td>IV</td>
<td>2.96</td>
<td>0.582</td>
<td>3</td>
</tr>
<tr>
<td>V</td>
<td>2.69</td>
<td>0.191</td>
<td>5</td>
</tr>
<tr>
<td>VI</td>
<td>2.09</td>
<td>0.090</td>
<td>6</td>
</tr>
</tbody>
</table>

(Rank – based on mean)

Among the chapters of research, Chapter III or Research Framework was identified as the most difficult part of doing research having an interpretation of “High Level of Difficulty” for all clusters. Based on the explanations of teachers, Research Framework of the Study was the most difficult part due to the following reasons: (1) deciding the best framework appropriate to the studies, (2) same as the literature, deciding on the framework requires too much thinking, (3) hard to find a framework that is related to the current study, and (4) it is hard to connect things/variables that will affect one another. Overall, teachers found it difficult to conceptualize a framework for the research entails a lot of studies and comprehensive effort before a researcher can make his/her own research framework. Choices of approachable framework and time to read more framework as a guide are also considered factors. Doing Chapter II or writing the literature review of research also needs attention since it ranked second among all chapters of research although the overall rating is Moderate. According to the teachers, writing the Literature Review is difficult because of the following reasons: (1) time constraint, (2) difficult to find the appropriate literature, (3) if the related studies are limited, (4) choice of credible literature, and (5) availability of updated/recent literature. The element of time has been the first reason in writing this part of research. Thus, the Research Department should focus on training teachers in these particular parts of research.

On the other hand, the three clusters have the lowest difficulty in doing Chapter VI which indicates that teachers find it easy to write the Summary, Conclusions, and Recommendations among all chapters.

Implications of Conducting Action Research in Teaching-Learning Process

Table 5 shows the frequency of response (Yes or No) of teachers from the three clusters for the implications of conducting action research in teaching-learning process. As seen from this table, all teachers agreed that action research is valuable to the teaching-learning process for both teachers and students for statements 1 and 2. Likewise, almost all of the teachers said that action research project positively impacted both students’ learning and teaching. This proves that action research as viewed and assessed by teachers has a major role in improving the teaching learning process.

Table 5. Implications of Conducting Action Research in T-L Process as Assessed by Teachers

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mathematics-Science &amp; Technology</th>
<th>MAPEH-TLE</th>
<th>Socio-Linguistic</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>1. Action research is valuable to the teaching and learning process for me as a teacher.</td>
<td>11</td>
<td>0</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>2. Action research is valuable to the teaching and learning process for my students.</td>
<td>11</td>
<td>0</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>3. Action research project positively impacted my students’ learning.</td>
<td>10</td>
<td>1</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>4. Action research project positively impacted my teaching.</td>
<td>11</td>
<td>0</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>5. I view myself as a teacher-researcher.</td>
<td>5</td>
<td>6</td>
<td>5</td>
<td>1</td>
</tr>
</tbody>
</table>

According to Brown (2002), as teachers engage in studying, they increase their knowledge about the teaching and learning process. Professional growth based on action research encourages teachers to involve themselves as learners. Action
research engages teachers in the process of examining and reflecting on how to improve practice, studying the literature and research related to their inquiries, and then implementing a strategy intended to improve current practice.

However, statement 5 got 15 out of 27 (56%) where teachers did not agree that they view themselves as teacher-researchers. The primary sub-theme gathered is difficulty due to time-constraint. According to them, they cannot devote time as a teacher-researcher given the demands of doing research while being a teacher. One teacher said that being a teacher is more important than being a teacher-researcher. Likewise, some teachers believe that they can be effective even without undergoing research work.

Specifically, the following statements were rated by the 3 clusters of teachers:

1. Action research is valuable to the teaching and learning process for me as a teacher.

Overwhelmingly, when teachers were asked about their agreement with the statement, “Action research is valuable to the teaching and learning process for me as a teacher,” all of the teachers’ response is “Yes.” Therefore, teachers believe that action research is vital to the teaching and learning process.

From the responses, the strength and weaknesses of teaching-learning process is the most dominating sub-theme gathered. Teachers were able to evaluate the teaching-learning process by giving feedback on how certain strategies affect students. This indicates that the teachers undergo series of reflection to check the difficulties encountered by the students in dealing with activities or lessons which eventually improves the teaching-learning process.

In addition, “writing skills” is also considered as a sub-theme.

“Though I struggled and exerted so much effort just to finish my action research, the experiences of doing such made me improve my skills in formal writing.”

“lets you read a lot of literature and studies that keeps you updated and it can help you research on the whereabouts”

2. Action research is valuable to the teaching and learning process for my students.

All of the teachers agreed that action research is valuable to the teaching and learning process for students. The comments of the teachers mostly dealt on the effect of action research on the academic performance of the students. Teachers believed that students can keep track of their performance during the teaching-learning process. In addition, action research also helps the academic performance of the learners as assessed by the teachers.

Gorski (2015) said that Teacher Action Research (TAR) is a method for educational practitioners to engage in the assessment and improvement of their own practice. It can be an individual tool, helping classroom teachers reconsider their teaching methods or to adapt in order to solve a problem. It can also be a community activity, helping teams of educators assess problems in schools, enact changes, and reassess.

3. Action research project positively impacted my students’ learning.

Majority (93%) of the teachers agreed that action research project positively impacted students’ learning, while 2 out of 27 (7%) teachers did not agree to the statement. From the responses, teaching strategies and learning experiences of the students were the sub-themes selected.

“identify program’s strength and areas for growth”

“I observed that my students were able to visualize easily using the model I used.”

“They were motivated to learn and eventually they realized that learning is easy.”

“shows improvement in the students’ performance”

“can make a positive effect especially to the students”

“help students to learn in their own way”

“students learn more by experience”

“They were given options to learn and explore other things.”

4. Action research project positively impacted my teaching.

There are 26 out of 27 (96%) teachers said “Yes,” action research project positively impacted their teaching. Most of the teachers mentioned that action research has helped them improve their strategies, techniques, and teaching styles. Some of them commented that, “design better training programs for teachers and students,” “I need to revise or modify my teaching styles because the results of research suggest it. Thus, it helps improve the teaching and help me realize to consider other factors in my teaching process,” “it gave me an idea of what methods must be continued and which methods must be changed/improved.” “very beneficial to the teachers and learners”, and “learned different strategies.”
(2000) said that by utilizing the action research process, teachers not only learn about students and colleagues, but also they learn about themselves as they seek ways to continually improve.

5. I view myself as a teacher-researcher.

There are 15 out of 27 (56%) teachers who did not agree to the statement that they view themselves as teacher-researchers. The primary sub-theme gathered is difficulty due to time-constraint. According to them, they cannot devote time as a teacher-researcher given the demands of doing research while being a teacher. One teacher said that being a teacher is more important than being a teacher-researcher. Likewise, some teachers believe that they can be effective even without undergoing research work.

On the other hand, some teachers believe that engaging in research gives them an opportunity to improve the teaching-learning process as well as the curriculum offerings of the department as research gives an opportunity to know how students process things, how teaching can optimize learning, and how to integrate technology in education.

Impact on teachers’ current and future instructional practices

The third part of the question asked to describe how the completion of action research projects would impact their current and instructional practices. Data were organized into three categories: long-lasting career impact, confidence/empowerment impact, and daily instructional impact.

Long-lasting career impact. When teachers were asked about the long-lasting career impact of action research projects will have on their professional career, most of the teachers believe that conducting action research help them in their professional growth through promotions and ranking as research output can be considered a factor in the merit system/advantage for employment purposes. Teachers also believe that through action research, writing and research skills were developed. Aside from the incentive it provided due to the FDA, it can hone one’s skills in research which is an important thing that teacher should acquire and should possess. Likewise, educational practices and principles in teaching were also improved as research verifies and refutes practices that are vital to teaching.

Confidence/empowerment impact. Some of the teachers claimed that action research improved High School curriculum through action research. In addition, current trends and practices were also improved because of research as one respondent answered that through action research, there is an opportunity to contribute to the learning process with methods that fit the 21st century learners’ need. Teachers also realized that learning is a never ending process. Likewise, one teacher also mentioned that it feels more confident because you are guided by the results of your research. Self improvement or career growth was also developed as teachers become more knowledgeable of the different principles, philosophies, objectives of educational management and practices. At the same time through research, teachers learned to value time and practice to have great patience.

Daily instructional practices impact. Majority of the teachers believed that research supported their instructional practices through improved teaching approaches, strategies, methods, styles, and instructional materials as additional techniques are being added to the repertoire of teaching technique. One teacher-respondent mentioned that different learning outcomes guided her in the different teaching strategies and approaches she needs to give to her students. In addition, curriculum design is also improved when teachers conduct action research as one teacher said that their voices/insights/ideas were heard and approved by the administrators which they can use in their instructional practices.

Engagement in action research

Finally, teachers were asked about the issues arose while engaging in action research and how did they resolve them. Majority of the teachers’ answer is time constraint. Teachers have always the difficulty to find time in conducting research. Most of them said that time management has always been a big factor because conducting research demands time. If a teacher is loaded with different preparations, one can hardly comply on time. In addition, one teacher mentioned that availability of time in gathering and writing is very hard to do especially if you are a full time teacher. It is hard to write during vacant period because it is already allocated in assisting the students, beyond school hours, teachers need to work on the lessons so finally time would be highly or greatly difficult. In addition, teachers still need to improve and be guided in writing research paper as reflected in the difficulties they encountered in doing research. Some teachers are still not confident with statistical analysis and interpretation of data as one teacher responded that “My knowledge on research and statistics need updating. I asked help from friends and colleagues. The interest is also very helpful. I survived the research project yet I need to improve on my skills”.

On the other hand, some teachers believe that engaging in research gives them an opportunity to improve the teaching-learning process as well as the curriculum offerings of the department as research gives an opportunity to know how students process things, how teaching can optimize learning and how to integrate technology in education.

CONCLUSION

Based on the findings of this study, the following may be claimed:
1. Writing the Framework of the Study appeared to be the most difficult due to the lack of expertise of teachers in identifying variables needed for their study. In addition, teachers also have the difficulty on finding framework or theories that are related to their study.

2. Involvement in action research project has direct impacts on current and future instructional practices.

3. Conducting teacher action research is difficult for teachers due to time constraints in as much as they want to be involved in this activity because of its positive effect on their professional growth and career.

LIMITATION AND STUDY FORWARD

The results of the evaluation of the teachers to the questionnaire were the bases in drawing out conclusions. Moreover, the effect of conducting action research through experimentation was not included in the study. The following are the future plans of the study:

1. Parts of action research, which were considered very difficult for teachers should be the focus of training and development specifically on writing the Conceptual Framework of the Study which appeared to be most difficult for teachers due to limitations of time. Other parts peculiar to some clusters could also be included.

2. Difficulty encountered by teachers in doing action research project must be addressed as teachers also perceived that conducting action research as time-consuming and overwhelming. The burden of conducting action research can be lessened if there would be early proposals of research during summer months. The number of hours spent during summer months should be carried-over to the number of FDA hours of the teacher-researcher to the next academic year.

3. In addition, the number of teaching load and teacher tasks require too much time that they cannot devote for research. This affects the time required for teachers to conduct research. In order for teachers to conduct researches, there should be lesser teaching load to provide extra time for institutional researches and support more teacher researchers.

4. Though the school administrators are knowledgeable about the professional development opportunity that action research offers, they should also realize that support during the implementation steps of an action research study, specifically, during the data analysis phase, is essential to the teacher’s and school’s success. There should be a regular Statistician in the Research Department to provide expertise on statistical treatment and data analyses.

ACKNOWLEDGEMENT

Special thanks to O’Connor, Greene, and Anderson (2006) for the adapted and modified survey instrument though some changes were made according to the needs of the study. Likewise, I would like to thank the Research Department for the support of this study and faculty members of Colegio de San Juan de Letran Calamba – Junior High School who had been part of this study.

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