

Performance Indicators of Heads Department at La Salle Bangkok College in Leading Participatory Action Research^{*}

ตัวบ่งชี้สมรรถนะวิสัยของหัวหน้าภาควิชา วิทยาลัยลาซาล กรุงเทพมหานครในการนำเพื่อทำวิจัย
เชิงปฏิบัติการอย่างมีส่วนร่วม

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Abstract:

The purpose of this research was to study the performance indicators and to determine the guidelines of performance indicators of heads department at La Salle Bangkok College in leading the participatory action research. The samples consisted of lectures, heads department, deans, and advanced administrators at La Salle Bangkok College; 113, 10, 3, and 4, respectively by Purposive Sampling and the research instruments were in-depth interview, focus group discussion, observing tool and opinionnaire. The statistics in analyzing the data were frequency, percentage, arithmetic mean and standard deviation (S.D.) and the statistics in analyzing the factors are Exploratory Factor Analysis (EFA) by Principal Component Analysis (PCA) and 7 experts' verification of research, and Content Analysis.

The research findings found that:

1. For Performance Indicators by Exploratory Factor Analysis (EFA) by Principal Component Analysis (PCA), it found that there were 8 components that 1) Component Number 1: 20 variables: the weight of component were at 0.808-0.527 and the researcher named this component, "PAR's Knowledge". 2) Component Number 2: 14 variables: the weight of component were at 0.511-0.854 and the researcher named this component, "PAR's Training". 3) Component Number 3: 18 variables: the weight of component were at 0.513-0.756 and the researcher named this component, "PAR's Creation". 4) Component Number 4: 11 variables: the weight of component were at 0.608-0.787 and the researcher named this component, "PAR's Defining". 5) Component Number 5: 7 variables: the weight of component were at 0.529-0.700 and the researcher named this component, "PAR's Identifying". 6) Component Number 6: 4 variables: the weight of component were at 0.564-0.777 and the

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researcher named this component, “PAR’s Making”. 7) Component Number 7: 4 variables: the weight of component were at 0.640-0.714 and the researcher named this component, “PAR’s Playing the field”, and 8) Component Number 8: 3 variables: the weight of component were at 0.582-0.674 and the researcher named this component, “PAR’s Building”.

2. For guideline of performance indicators of heads department, a researcher found that there were 8 guidelines according to 7 expert’s verification of research on Participatory Action Research (PAR) as below:

1) PAR’s Knowledge, 2) PAR’s Training, 3) PAR’s Creation, 4) PAR’s Defining, 5) PAR’s Identifying, 6) PAR’s Making, 7) PAR’s Playing the field, and 8) PAR’s Building

Keywords: performance indicators / participatory action research

บทคัดย่อ

การวิจัยครั้งนี้มีวัตถุประสงค์เพื่อศึกษาตัวบ่งชี้สมรรถนะวิสัย และทราบแนวทางของการได้มาซึ่งตัวบ่งชี้สมรรถนะวิสัย ของหัวหน้าภาควิชาวิทยาลัยลาซาล กรุงเทพมหานคร ในการนำเพื่อทำวิจัยเชิงปฏิบัติการอย่างมีส่วนร่วม กลุ่มตัวอย่างคือ อาจารย์, หัวหน้าภาควิชา, คณบดี และผู้บริหารระดับสูงของวิทยาลัยลาซาล กรุงเทพมหานคร จำนวน 113, 10, 3 และ 4 คนตามลำดับ ได้มาจากการเลือกแบบเจาะจง เครื่องมือที่ใช้ในการวิจัยคือ แบบสัมภาษณ์เชิงลึก แบบการสนทนากลุ่ม แบบสังเกตพฤติกรรม และแบบสอบถามความคิดเห็น สถิติที่ใช้ในการวิเคราะห์ข้อมูลคือ ความถี่ ร้อยละ ค่ามัธยฐานเลขคณิต และส่วนเบี่ยงเบนมาตรฐาน และสถิติที่ใช้ในการวิเคราะห์ปัจจัย คือ การวิเคราะห์ปัจจัยเชิงสำรวจ ด้วยวิธีการสกัดปัจจัย ประกอบกับการยืนยันรูปแบบงานวิจัยด้วยผู้เชี่ยวชาญด้านการทำวิจัยเชิงปฏิบัติการอย่างมีส่วนร่วมจำนวน 7 คน และการวิเคราะห์เนื้อหา

ผลการวิจัยพบว่า

1. สำหรับการวิเคราะห์ด้วยวิธีการวิเคราะห์ปัจจัยเชิงสำรวจ โดยวิธีการสกัดปัจจัย ได้องค์ประกอบจำนวน 8 องค์ประกอบ กล่าวคือ 1) องค์ประกอบที่ 1: 20 ตัวแปร: ค่าน้ำหนักองค์ประกอบอยู่ระหว่าง 0.808-0.527 โดยผู้วิจัยกำหนดชื่อองค์ประกอบนี้ว่า องค์ความรู้เกี่ยวกับการวิจัยเชิงปฏิบัติการอย่างมีส่วนร่วม 2) องค์ประกอบที่ 2: 14 ตัวแปร โดยผู้วิจัยกำหนดชื่อองค์ประกอบนี้ว่า การฝึกปฏิบัติเกี่ยวกับการวิจัยเชิงปฏิบัติการอย่างมีส่วนร่วม 3) องค์ประกอบที่ 3: 18 ตัวแปร โดยผู้วิจัยกำหนดชื่อองค์ประกอบนี้ว่า การสรรค์สร้างเกี่ยวกับการวิจัยเชิงปฏิบัติการอย่างมีส่วนร่วม 4) องค์ประกอบที่ 4: 11 ตัวแปร โดยผู้วิจัยกำหนดชื่อองค์ประกอบนี้ว่า การตีความเกี่ยวกับการวิจัยเชิงปฏิบัติการอย่างมีส่วนร่วม 5) องค์ประกอบที่ 5: 7 ตัวแปร โดยผู้วิจัยกำหนดชื่อองค์ประกอบนี้ว่า การระบุชื่อเกี่ยวกับการวิจัยเชิงปฏิบัติการอย่างมีส่วนร่วม 6) องค์ประกอบที่ 6: 4 ตัวแปร โดยผู้วิจัยกำหนดชื่อองค์ประกอบนี้ว่า การปฏิบัติเกี่ยวกับการวิจัยเชิงปฏิบัติการอย่างมีส่วนร่วม 7) องค์ประกอบที่ 7: 4 ตัวแปร โดยผู้วิจัยกำหนดชื่อองค์ประกอบนี้ว่า การเข้าถึงขอบข่ายเกี่ยวกับการวิจัยเชิงปฏิบัติการอย่างมีส่วนร่วม และ 8) องค์ประกอบที่ 8: 3 ตัวแปร โดยผู้วิจัยกำหนดชื่อองค์ประกอบนี้ว่า การสร้างนวัตกรรมเกี่ยวกับการวิจัยเชิงปฏิบัติการอย่างมีส่วนร่วม

2. สำหรับแนวทางของตัวบ่งชี้สมรรถนะวิสัยของหัวหน้าภาควิชาในการนำเพื่อทำวิจัยเชิงปฏิบัติการอย่างมีส่วนร่วมนั้น จากการยืนยันของผู้เชี่ยวชาญด้านการทำวิจัยเชิงปฏิบัติการอย่างมีส่วนร่วมจำนวน 7 คนแล้วนั้น พบว่า มีแนวทางจำนวน 8 แนวทางด้วยกัน คือ

1) องค์ความรู้เกี่ยวกับการวิจัยเชิงปฏิบัติการอย่างมีส่วนร่วม 2) การฝึกปฏิบัติเกี่ยวกับการวิจัยเชิงปฏิบัติการอย่างมีส่วนร่วม 3) การสรรค์สร้างเกี่ยวกับการวิจัยเชิงปฏิบัติการอย่างมีส่วนร่วม 4) การตีความเกี่ยวกับการวิจัยเชิงปฏิบัติการอย่างมีส่วนร่วม 5) การระบุนโยบายเกี่ยวกับการวิจัยเชิงปฏิบัติการอย่างมีส่วนร่วม 6) การปฏิบัติเกี่ยวกับการวิจัยเชิงปฏิบัติการอย่างมีส่วนร่วม 7) การเข้าถึงขอบข่ายเกี่ยวกับการวิจัยเชิงปฏิบัติการอย่างมีส่วนร่วม และ 8) การสร้างนวัตกรรมเกี่ยวกับการวิจัยเชิงปฏิบัติการอย่างมีส่วนร่วม

คำสำคัญ: ตัวบ่งชี้สมรรถนะวิสัย / การวิจัยเชิงปฏิบัติการแบบมีส่วนร่วม

Introduction:

Nowadays, the higher instructions, especially the private one is trying to develop by itself and it is going to be grown very much due to the needs of students who do not want to compete with others for entering the public university. And this type of students also want to meet and study with the smart, intelligent and modern lecturers at the university. So the college or university must prepare many types of lecturers by themselves for requesting many students to study here. And the research pieces are very important for one of methods to develop the lecturers at the college and the Office of the Higher Education Commission and the Private Universities' Academic Affairs Division have to control the quality of research and students' outcome for guaranteeing the quality in the Higher Instructions in Thailand. According to Pravej Vasi (2013) commented that Thai Higher Education or Higher Instruction has many various differences and problems. And the most important, the Higher Instruction cannot be stayed without research, especially Participatory Action Research because the lecturers must teach their students and make a research for developing or improving their academic pieces and classroom' tasks also. Moreover, the administrators has a duty to control or administrate the organization to be successful and perfect like La Salle Bangkok College also greatly paid attention with the above details in order to develop the lecturers and employees to be stronger, more intelligent, and perfect.

Research objectives:

To study the performance indicators and to determine the guidelines of performance indicators of heads department at La Salle Bangkok College in leading participatory action research.

Research Methodology:**Populations and samples:**

For the population in this research, they were lecturers, heads department, deans and advanced administrators at La Salle Bangkok in the semestre 2014; 550 persons and the samples came by Purposive Sampling that composed of 113, 10, 3, and 4 persons, respectively at La Salle Bangkok in the semestre 2014; 227 persons. And a researcher used Taro Yamane's Formula (1967) for finding the samples of this research.

Variable Definitions:

Basic Factors were the factors related to status of participants which composed of Educational Level, Position, Section, Seminar experiences related to the participatory action research and Practice experiences related to the participatory action research Studied Factors were the factors related to the Performance Indicators of Heads Department at La Salle Bangkok College in leading participatory action research.

Research Instruments:

For this research, a researcher used in-depth interview, focus group discussion, observing tool and opinionnaire that there were five choices in the second part according to Likert's Rating Scale, IOC (Index of Item-Objective Congruence) which the items' IOC values were be more 0.50, and the reliability by Try-out with 30 lecturers using Cronbach's Alpha Coefficient and got the whole reliability as .859.

Step I: Opinionnaire was related to the status of participant which were Check List related to the Educational Level, Position, Section, Seminar experiences related to the participatory action research and Practice experiences related to the participatory action research.

Step II: Opinionnaire was related to the Performance Indicators of Heads Department at La Salle Bangkok College which was a multiple choice.

Data Analysis and Statistics Use:

A researcher checked the opinionnaire's perfectness, analyzed the data related to the status of participant by Frequency and Percentage, and analyzed the responses of participant by Arithmetic Mean and Standard Deviation (S.D.) and a researcher used Descriptive

Statistics: Frequency, Percentage, Arithmetic Mean, and Standard Deviation (S.D.), and Inferential Statistics: Exploratory Factor Analysis (EFA) by Principal Component Analysis (PCA) and 7 experts' verification of research, and Content Analysis.

Research Finding:

Stage 1: The analysis of the performance indicators of heads department at La Salle Bangkok College in leading participatory action research.

From the opinionnaire's results, the performance indicators and guidelines of Heads Department at La Salle Bangkok College in Leading Participatory Action Research, in general, was at the high level ($\bar{x} = 4.34$ and $S.D.= 0.25$). When considering each side, it was found that respondents gave the most opinion in the heads department run on the process design which is a flexible system approach to planning and managing an inquiry process grounded in action ($\bar{x} = 4.95$ and $S.D.= 0.22$), The heads department define the project or programme and review its goals and plans to achieve them ($\bar{x} = 4.95$ and $S.D.= 0.24$) and the heads department plan the documentation testing and capability-building process which composes of context, purpose, summary, analysis, interpretation, follow-up actions and observations ($\bar{x} = 4.95$ and $S.D.= 0.22$), and the respondents gave the least opinion in the heads department run on the measuring process of PAR. ($\bar{x} = 3.54$ and $S.D.= 0.93$), respectively.

KMO (Kaiser-Meyer-Olkin Measure of Sampling Adequacy (1970) had the value as .821 that had a reasonable value for Exploratory Factor Analysis (EFA) by Principal Component Analysis (PCA).

Factor Extraction by Principal Component Analysis (PCA) and Rotation:

A researcher used the Principal Component Analysis (PCA) for making the Factor Extraction and turned the tube according to Orthogonal Rotation by Varimax that a researcher got 8 factors which have Eigen Value more than or equal at 1.0 and there were many variables which explained the factors at least 3 variables that a researcher focused the Factor Loading at 0.55. So the variable must have the value of weight of Factor Loading at least 0.30.

The components of performance indicators and guidelines had 8 components that composed of component numbers 1, 2, 3, 4, 5, 6, 7, and 10: the Eigen Value was at 2.292-12.944 that was more than 1.0, the percentage of variance was at 1.879-10.61 and the percentage of cumulative was at 10.611-53.535.

The component no. 1 had 20 variables and the weight of component were at 0.808-0.527 and the researcher named this component, "PAR's Knowledge". For the highest

component was no. 43, “PAR’s Explaining”, and the lowest component was no. 51, “PAR’s Having the baseline”.

The component no. 2 had 14 variables and the weight of component were at 0.511-0.854 and the researcher named this component, “PAR’s Training”. For the highest component was no. 86, “PAR’s Resourcing”, and the lowest component was no. 80, “PAR’s Orientating”.

The component no. 3 had 18 variables and the weight of component were at 0.513-0.756 and the researcher named this component, “PAR’s Creation”. For the highest component was no. 15, “PAR’s Preparing”, and the lowest component was no. 4, “PAR’s Experiencing”.

The component no. 4 had 11 variables and the weight of component were at 0.608-0.787 and the researcher named this component, “PAR’s Defining”. For the highest component was no. 61, “PAR’s Brainstorming”, and the lowest component was no. 67, “PAR’s Using”.

The component no. 5 had 7 variables and the weight of component were at 0.529-0.700 and the researcher named this component, “PAR’s Identifying”. For the highest component was no. 114, “PAR’s Visualizing”, and the lowest component was no. 106, “PAR’s Interesting”.

The component no. 6 had 4 variables and the weight of component were at 0.564-0.777 and the researcher named this component, “PAR’s Making”. For the highest component was no. 97, “PAR’s Running the stakeholder”, and the lowest component was no. 104, “PAR’s Legitimizing”.

The component no. 7 had 4 variables and the weight of component were at 0.640-0.714 and the researcher named this component, “PAR’s Playing the field”. For the highest component was no. 98, “PAR’s Playing the field”, and the lowest component was no. 105, “PAR’s Positing”.

The component no. 8 had 3 variables and the weight of component were at 0.582-0.674 and the researcher named this component, “PAR’s Building”. For the highest component was no. 28, “PAR’s Building”, and the lowest component was no. 34, “PAR’s Describing”.

From in-dept interview’s results, by the experts on the participatory action research (PAR) should be composed of many factors as below:

1. PAR’s Knowledge: This component should be composed of PAR’s Managing, PAR’s Adjusting, PAR’s Aiming, PAR’s Combining, PAR’s Eliciting, PAR’s Using, PAR’s Explaining, PAR’s Having the different ways of skill, PAR’s Designing,

PAR's Setting, PAR's Designing the options, PAR's Having the combination, PAR's Having the weighting, PAR's Having the variation, PAR's Having the baseline, PAR's Having the strategic planning, PAR's Monitoring, PAR's Running the dialogue, PAR's Assessing, and PAR's Engaging.

2. PAR's Training: This component should be composed of Par's Orientating, PAR's Acknowledging, PAR's Resourcing, PAR's Time lining, PAR's Routing, PAR's Typing, PAR's Counteracting, PAR's Forcing, PAR's Understanding, PAR's Running the beyond logic, PAR's Para doxing, PAR's Naming, and PAR's Working.

3. PAR's Creation: This component should be composed of PAR's Experiencing, PAR's Defining, PAR's Instructing, PAR's Creating the logical plan, PAR's Examining, PAR's Evaluating, PAR's Rethinking, PAR's Preparing, PAR's Discussing, PAR's Marking, PAR's Graphing, PAR's Processing, PAR's Considering, PAR's Planning, PAR's Identifying, PAR's Purposing, PAR's Clarifying, and PAR's Forming the languages.

4. PAR's Defining: This component should be composed of PAR's Brainstorming, PAR's Listening, PAR's Ranking, PAR's Drawing, PAR's Developing, PAR's Using, PAR's Having the Criteria, PAR's Rating, PAR's Scoring, PAR's Elementa ting, and PAR's Scaling.

5. PAR's Identifying: This component should be composed of PAR's Interesting, PAR's Visioning, PAR's Sabotaging, PAR's Determining, PAR's Addressing, PAR's Visualizing, and PAR's Controlling.

6. PAR's Making: This component should be composed of PAR's Running, PAR's Acting, PAR's Powering, and PAR's Legitimizing.

7. PAR's Playing the field: This component should be composed of PAR's Playing the field, PAR's Analyzing, PAR's Attending, and PAR's Positing.

8. PAR's Building: This component should be composed of PAR's Building, PAR's Rolling, and PAR's Describing.

Stage 2: The analysis of the guidelines of performance indicators of heads department at La Salle Bangkok College in leading participatory action research.

From the first stage, for this part, by focus group discussion. It summarized in the details as below:

From focus group discussion, a researcher summarized as below:

1. The instructors needed to be supported from the university or the advanced administrators in the way of budgets, equipment, documentaries, related researches and other factors which would be good and useful for their participatory action research process at the college and outside the college also that was related to the PAR's components: PAR's Knowledge, PAR's Training, and PAR's Creation which a researcher found from the research's result by Exploratory Factor Analysis by Principal Component Analysis (PCA) and they had the same qualities and descriptions that a researcher could explain in this step.

2. The college also had to support the full time for making a participatory action research because at the present time, the instructors or lecturers cannot have enough time to do that due to hard classes and other duties which they must be responsible at the college that was related to the PAR's components: PAR's Creation, and PAR's Defining which a researcher found from the research's result by Exploratory Factor Analysis by Principal Component Analysis (PCA) and they had the same qualities and descriptions that a researcher could explain in this step.

3. Is it possible to promote their participatory action research results to the public more than in the present time? That was related to the PAR's component: PAR's Identifying which a researcher found from the research's result by Exploratory Factor Analysis by Principal Component Analysis (PCA) and they had the same qualities and descriptions that a researcher could explain in this step.

4. The instructors or lecturers required for decreasing the class for sharing the time to make a participatory action research with their students at the college and outside the college; included the communities around the college also that was related to the PAR's components: PAR's Making and PAR's Playing the field which a researcher found from the research's result by Exploratory Factor Analysis by Principal Component Analysis (PCA) and they had the same qualities and descriptions that a researcher could explain in this step.

5. The heads department had to greatly pay attention to share the ideas and ways of making a participatory action research very much to the lecturers for having a great result and for developing or improving the learners or students at the college nowadays that was related to the PAR's component: PAR's Building which a researcher found from the research's result by Exploratory Factor Analysis by

Principal Component Analysis (PCA) and they had the same qualities and descriptions that a researcher could explain in this step.

And the, the part of observing tool. It summarized in the details as below:

For this part, a researcher had a set of team in observing the heads department in practice or non-practice according to the researcher's items in the observing tool form. And after that, a researcher found that most heads department practiced the activities according the items of researchers but some of item as like number 10, "Offering the spiritual effort the lecturers and their teams on the process of participatory action research all the time." which the heads department rarely practiced while they had a duty at the college. For any reasons, a researcher could not know that but it might be because of their other hard and difficult duties so they did not greatly pay attention to do that according to the item number 10 and the results of this observing tool form was also relevant to the results of opinionnaire that the heads department did not greatly pay attention to give the spiritual effort and the respondents, included the advanced administrators also gave this comments as like the results of this topic that we could infer that the heads department should improve themselves about this item (Item No. 10) for developing the behavior or spirit to the teams at the college all the time. Anyway, a researcher would like to support the heads department to be a leader in participatory action research at the college all the time because they can take their teams to be successful and perfect in one day in the future. Anyway, the results of behavioral observation of heads department in leading participatory action research at La Salle Bangkok College was significantly related to the results of Exploratory Factor Analysis (EFA) by Principal Component Analysis (PCA) and a researcher found an important point of view from this behavioral observation.

Stage 3: The verification of research of the guidelines of performance indicators of heads department at La Salle Bangkok College in leading participatory action research.

7 experts significantly and usefully concluded as below.

1. PAR's Knowledge: This component should be composed of PAR's Managing, PAR's Adjusting, PAR's Aiming, PAR's Combining, PAR's Eliciting, PAR's Using, PAR's Explaining, PAR's Having the different ways of skill, PAR's Designing, PAR's Setting, PAR's Designing the options, PAR's Having the combination, PAR's Having the weighting, PAR's Having the variation, PAR's Having the baseline, PAR's

Having the strategic planning, PAR's Monitoring, PAR's Running the dialogue, PAR's Assessing, and PAR's Engaging.

2. PAR's Training: This component should be composed of Par's Orientating, PAR's Acknowledging, PAR's Resourcing, PAR's Time lining, PAR's Routing, PAR's Typing, PAR's Counteracting, PAR's Forcing, PAR's Understanding, PAR's Running the beyond logic, PAR's Para doxing, PAR's Naming, and PAR's Working.

3. PAR's Creation: This component should be composed of PAR's Experiencing, PAR's Defining, PAR's Instructing, PAR's Creating the logical plan, PAR's Examining, PAR's Evaluating, PAR's Rethinking, PAR's Preparing, PAR's Discussing, PAR's Marking, PAR's Graphing, PAR's Processing, PAR's Considering, PAR's Planning, PAR's Identifying, PAR's Purposing, PAR's Clarifying, and PAR's Forming the languages.

4. PAR's Defining: This component should be composed of PAR's Brainstorming, PAR's Listening, PAR's Ranking, PAR's Drawing, PAR's Developing, PAR's Using, PAR's Having the Criteria, PAR's Rating, PAR's Scoring, PAR's Elementa ting, and PAR's Scaling.

5. PAR's Identifying: This component should be composed of PAR's Interesting, PAR's Visioning, PAR's Sabotaging, PAR's Determining, PAR's Addressing, PAR's Visualizing, and PAR's Controlling.

6. PAR's Making: This component should be composed of PAR's Running, PAR's Acting, PAR's Powering, and PAR's Legitimizing.

7. PAR's Playing the field: This component should be composed of PAR's Playing the field, PAR's Analyzing, PAR's Attending, and PAR's Positing.

8. PAR's Building: This component should be composed of PAR's Building, PAR's Rolling, and PAR's Describing.

Conclusion of the Finding:

For this research, a researcher found that there were 8 components and 8 guidelines of performance indicators of heads department at La Salle Bangkok College in leading participatory action research as follow: 1) PAR's Knowledge, 2) PAR's Training, 3) PAR's Creation, 4) PAR's Defining, 5) PAR's Identifying, 6) PAR's Making, 7) PAR's Playing the field, and 8) PAR's Building.

And the guidelines of performance indicators of heads department was also related to above 8 components that 7 experts' verification of research on participatory action research made already proved and confirmed this 8 guidelines for my research.

Discussion:

This research could discuss into 2 parts of following the objectives: 1) the performance indicators of heads department at La Salle Bangkok College in leading participatory action research, and 2) the guidelines of performance indicators of heads department at La Salle Bangkok College in leading participatory action research as follow:

1. The performance indicators of heads department at La Salle Bangkok College in leading the participatory action research.

The research revealed that there were many steps according to above items that the researcher studied, made an in-dept interview for collecting many items. It showed that the lecturers or instructors could still make a participatory action research without the rules, suggestions, invitations, sharing the ideas from heads department etc. which was according to Paul S. Smith (2012) defined that the perfect teamwork must be together between leader and followers because they could help to create the new innovation for developing the organizations and works also. And a researcher focused on PDCA of Deming Cycle of W. Edwards Deming (2000) which composed of 4 steps of process as follow:

- 1.P: Planning-the researcher plans the project before running it.

- 2.D: Doing-the researcher takes the plan of project to run on at the college at the appropriate time.

- 3.C: Checking-the researcher controls and checks the plan if it runs correctly or smoothly.

- 4.A: Acting-the researcher improves the plan of project for preparing a new project or for a new researcher who wants to make a participatory action research as like a researcher at this time. That the PDCA Cycle was related to the Exploratory Factor Analysis (EFA) by Principal Component Analysis (PCA)'s results as below:

1. PAR's Knowledge: This component should be composed of PAR's Managing, PAR's Adjusting, PAR's Aiming, PAR's Combining, PAR's Eliciting, PAR's Using, PAR's Explaining, PAR's Having the different ways of skill, PAR's Designing, PAR's Setting, PAR's Designing the options, PAR's Having the combination, PAR's Having the weighting, PAR's Having the variation, PAR's Having the baseline, PAR's

Having the strategic planning, PAR's Monitoring, PAR's Running the dialogue, PAR's Assessing, and PAR's Engaging.

2. PAR's Training: This component should be composed of Par's Orientating, PAR's Acknowledging, PAR's Resourcing, PAR's Time lining, PAR's Routing, PAR's Typing, PAR's Counteracting, PAR's Forcing, PAR's Understanding, PAR's Running the beyond logic, PAR's Para doxing, PAR's Naming, and PAR's Working.

3. PAR's Creation: This component should be composed of PAR's Experiencing, PAR's Defining, PAR's Instructing, PAR's Creating the logical plan, PAR's Examining, PAR's Evaluating, PAR's Rethinking, PAR's Preparing, PAR's Discussing, PAR's Marking, PAR's Graphing, PAR's Processing, PAR's Considering, PAR's Planning, PAR's Identifying, PAR's Purposing, PAR's Clarifying, and PAR's Forming the languages.

4. PAR's Defining: This component should be composed of PAR's Brainstorming, PAR's Listening, PAR's Ranking, PAR's Drawing, PAR's Developing, PAR's Using, PAR's Having the Criteria, PAR's Rating, PAR's Scoring, PAR's Elementa ting, and PAR's Scaling.

5. PAR's Identifying: This component should be composed of PAR's Interesting, PAR's Visioning, PAR's Sabotaging, PAR's Determining, PAR's Addressing, PAR's Visualizing, and PAR's Controlling.

6. PAR's Making: This component should be composed of PAR's Running, PAR's Acting, PAR's Powering, and PAR's Legitimizing.

7. PAR's Playing the field: This component should be composed of PAR's Playing the field, PAR's Analyzing, PAR's Attending, and PAR's Positing.

8. PAR's Building: This component should be composed of PAR's Building, PAR's Rolling, and PAR's Describing.

For this part, a researcher took a Deming Cycle to be a part of a main item for making a participatory action research process for getting some new and useful knowledge or educational innovation which could be good and useful to the learners at the college nowadays. The researcher applied its rules of PDCA in his research while putting some techniques inside the opinionnaire and focus group discussion part also. And then, the researcher analyzed the documentaries and theories of academic experts and lecturers at the universities in Thailand and outside Thailand also for totaling the concepts and wrote the chapter 4 and 5 of this study. After that, the researcher proposed the research results to the advanced administrators of college for being a part of policies of college and the lecturers

could follow it all the time while teaching the students nowadays, respectively. Furthermore, a researcher greatly paid attention in asking for help from the heads department, lecturers, deans, advanced administrators of the college in guiding the way of writing the discussion of the research at this time also.

2. The guidelines of performance indicators of heads department at La Salle Bangkok College in leading participatory action research

The research revealed that there were 8 steps of guidelines of performance indicators of heads department in leading participatory action research which could be a main and important part of policies of La Salle Bangkok College in the future and it could be useful for the new researchers or students at the college. First, the researcher has reviewed and collected the concepts and opinions of experts, lecturers, academic experts, educators or related person and analyzed the knowledge for doing a participatory action research according to Dao Van Luong (2015) defined that the leaders of university is the most important for leading the participatory action research because they can order or transfer the policies about the participatory action research to the lecturers and all related employees at the university. If they lead directly and appropriately this item, the followers should directly and importantly follow it also and the results of research will be perfect and very useful to the organizations and students; included the other related persons outside the university also. And the most important, the research results will be a part of university policies in the future when there will be many new lecturers and students who want to work or study at that university. And then, the researcher took the all in-dept interview reviews to ask for the invitations and suggestions in writing the research with the President of La Salle Bangkok College: Broder Dr. Prapat Sricharoen who offered the useful and special technique in writing a research to the research until the chapter 4 and 5 was perfect as you see at this time. But the President suggested to the researcher that writing the chapter 4 and 5 should input some concepts or theories of experts about the participatory action research in and outside the country also such as Kunsinee Punya-apiwong (2015) defined that the research should be a team work for having the best research result at last, and Arunee Santhitiwanich (2015) defined that the process of making a research must be composed of two parts: team and participants for having the great result in the future, and a theory of Samuel K. Danny (2013) defined that the participatory action research guidelines should composes of 3 items as follow:

1. University Policies: this item will be useful when the researcher make a participatory action research with the samples who are the lecturers of that university and the

research results can be also an example of other research at the university. And the most important, the research results will be a part of university policies soon.

2. Experts' Concepts: inside the research, the researcher must put the experts' concepts for making a research stronger and more fruitful that the new readers or researchers can take this research as a reference in the future.

3. Overall Related Duties at the university: the researcher must observe the overall related duties to the participatory action research of lecturers or heads department for including the concepts of them inside the research and the research results will be good, useful and focused on the main point of the research and the related duty of lecturers at the university also.

A researcher concluded the guidelines of performance indicator of heads department at La Salle Bangkok College in leading participatory action research that the heads department and lectures must participate with the leaders or advanced administrators for getting the new and update educational innovation or concepts which are very useful and important to the instructions at the college nowadays according to the research's results from Exploratory Factor Analysis (EFA) by Principal Component Analysis (PCA) and 7 experts' verification of research that the researcher already and significantly presented the whole important details of research process in chapter 4.

Recommendation:

From the result of this research, the performance indicators and guidelines of performance indicators were proposed. In order to continuously determine the performance indicators and guidelines of performance indicators of heads department at La Salle Bangkok College in leading participatory action research, a researcher would love to give some recommendations as follow:

Recommendation for proposed policy:

1. It should apply this research results for being a part of college policies at La Salle Bangkok College for developing the organization in the future.

2. It should support the budgets, documentaries, related researches and equipment very much to the lectures for the participatory action research process at the college in order to have a new and update educational innovation at the college.

3. It should greatly pay attention to the lectures in part of spiritual effort to the heads department and lecturers for doing a participatory action research all the time.

Recommendation for further study:

1. A synthesis of the best performance indicators of heads department implementation.
2. The study of performance indicators of heads department in leading another topics.

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